363.68
HISTORY
1999

LEWIS & CLARK NATURAL HISTORY WALK

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MEPA/NEPA/HB495 CHECKLIST

PART I. PROPOSED ACTION DESCRIPTION

1. **Type of Proposed State Action**

Build the 10' wide and .75 mile, asphalt paved and gravel, *Lewis and Clark Natural History Walk* through portions of Giant Springs State Park in partnership and across lands leased to the Lewis and Clark National Historic Trail Interpretive Center.

2. **Agency Authority for the Proposed Action**

FWP has authority to provide development for public recreation on Department lands. 23-2-101 MCA.

PLEASE RETURN

3. **Name of Project**

Lewis and Clark Natural History Walk

4. **Name, Address and Phone Number of Project Sponsor (if other than the agency)**

Fish, Wildlife and Parks, Region Four - Parks Division, 4600 Giant Springs Rd., Great Falls, MT. 59405
Lewis and Clark National Forest : Lewis and Clark National Historic Trail Interpretive Center, P.O. Box 1806 Great Falls MT 59403-1806

5. **If Applicable:**

Estimated Construction/Commencement Date 3/1/2000.
Estimated Completion Date 7/31/2000.
Current Status of Project Design (% complete) 75%

6. **Location Affected by Proposed Action (county, range and township)**

Portions of Giant Springs/Heritage State Park in Cascade County, Sec 32,33 T21N, R4E. (See attached map).

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7. **Project Size: Estimate the number of acres that would be directly affected that are currently:**

(a) Developed:
residential . . . . . 0 acres
industrial . . . . . . 0 acres

(b) Open Space/Woodlands/
Recreation . . . . 10 acres

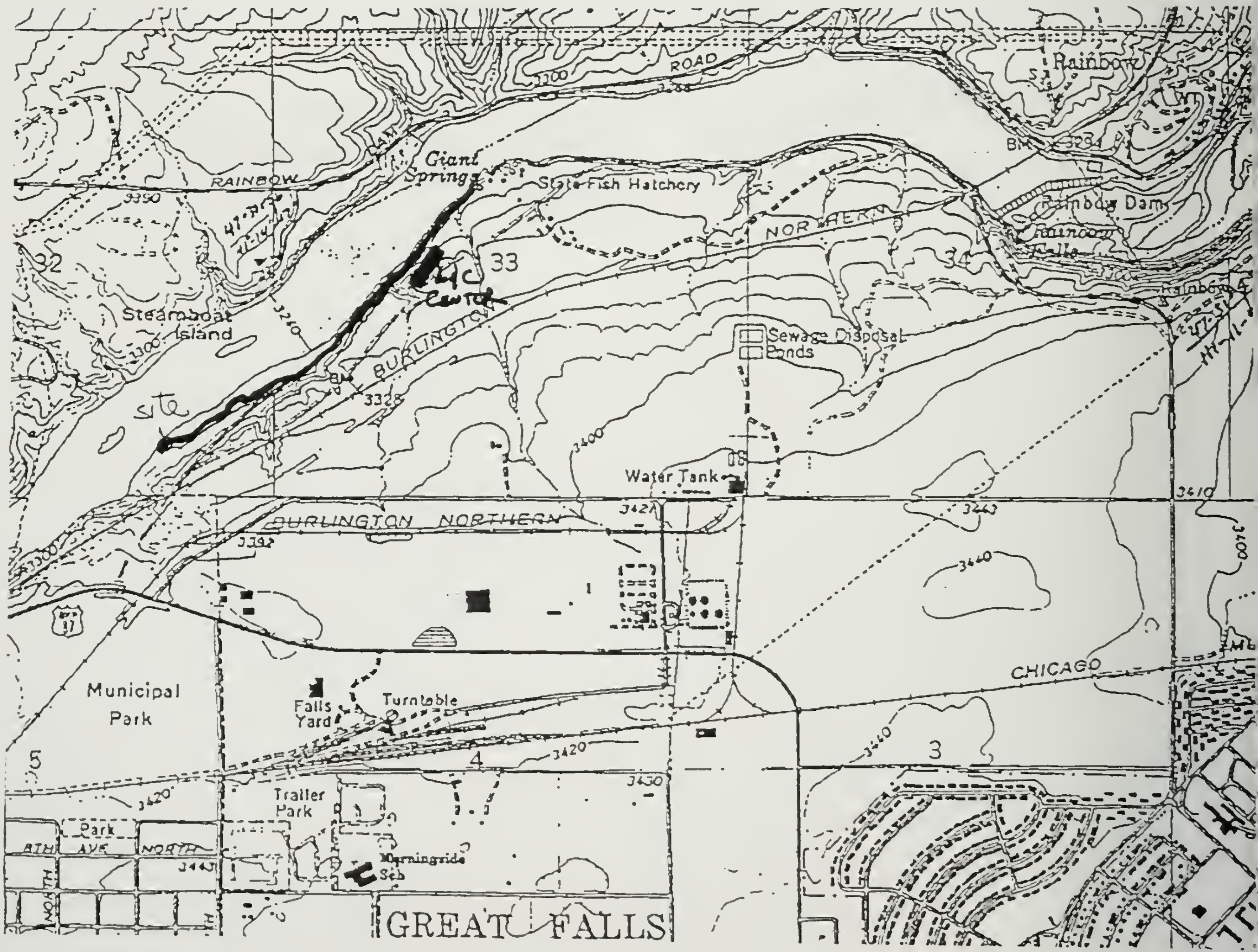
© Wetlands/Riparian
Areas . . . . 0 acres

(d) Floodplain . . . . 0 acres

(e) Productive:
irrigated cropland 0 dry
cropland . . . . 0 acres
forestry . . . . 0 acres
rangeland . . . . 0 acres
other . . . . 0 acres

This is a liberal estimation. Actual disturbed lands are less than 5 acres. But other acres will be affected by this action.

8. Map/site plan: attach an original 8 ½" x 11" or larger section of the most recent USGS 7.5' series topographic map showing the location and boundaries of the area that would be affected by the proposed action. A different map scale may be substituted if more appropriate or if required by agency rule. If available, a site plan should also be attached.



9. Narrative Summary of the Proposed Action or Project including the Benefits and Purpose of the Proposed Action.

FWP-Parks Division proposes to develop a walking asphalt and gravel trail with interpretive displays on the old county road bed near the Missouri river within the boundaries of Giant Springs State Park. The trail will run from near the Giant Springs to approximately .75 of a mile to the west and passing the Lewis and Clark National Historic Trail Interpretive Center. This Federal Intermodal Surface Transportation Enhancement Act (ISTEA) project is funded with 80% federal highway dollars and a 20% local match provided by the City of Great Falls, the Portage Route Chapter of the Lewis and Clark Trail Heritage Foundation, the Montana Wildlife and State Parks Interpretive Association, the Heritage State Park Commission and Montana Fish Wildlife and Parks. The trail tread will be ten feet wide and approximately .5 miles long on the old road bed while a .25 section will be 6' wide and will consist of a compacted gravel surface. Construction will be asphalt over a road base and will be built to ASHTO standards. This project is an extension of an existing sidewalk system in Giant Springs State Park.

The benefits of this project include: health benefits to the users; increased economic benefit to the city and state through increased tourism; increased educational opportunities and use of the State Park as an outdoor classroom; and increased recreational benefits to anyone using the trail.

10. **Listing of any other Local, State or Federal agency that has overlapping or additional jurisdiction.**

(a) Permits:

Agency Name	Permit	Date Filed/#

None

(b) Funding:

Agency Name	Funding Amount
ISTEA	$160,837.60
Heritage Park Commission	$ 4,104.70
FWP	$ 6,000.00
City of Great Falls	$ 10,000.00
Lewis and Clark Fund Inc	$ 20,104.70
$	
Total	$201,047.00

C. Other Overlapping or Additional Jurisdictional Responsibilities:

Agency Name	Type of Responsibility

None

11. **List of Agencies Consulted During Preparation of the EA:**

FWP - Region Four - Parks Division.
FWP - Design and Construction Bureau- Helena.
USFS - L&C National Forest - Great Falls.
Montana Power Company - Butte.
Recreational Trails Inc - Great Falls.
City-County Planning Board - Great Falls
Lewis and Clark National Historic Trail Interpretive Center - Great Falls
City of Great Falls

II. ENVIRONMENTAL REVIEW

ιL ENVIRONMENT

) RESOURCES proposed action result	IMPACT				Can Impact Be Mitigated	Comment Index
	Unknown	None	Minor	Potentially Significant		
stability or changes in geologic e?		X				
n, displacement, erosion, , moisture loss, or over-covering 1 would reduce productivity or			X		Yes	A.
:tion, covering or modification of jeologic or physical features?		X				
n siltation, deposition or erosion may modify the channel of a m or the bed or shore of a lake?		X				
of people or property to landslides, ground failure, or hazard?		X				
—		X				

ıtive Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

The trail will permanently impact an area 10 feet by approximately .75 miles. Some long term loss of productivity is to xpected. Any soil disturbed during construction will be replaced and native grasses and shrubs will be planted on all ırbed areas. This is being mitigated by reclaiming approximately 2 miles of user developed Trails in the immediate with native trees, shrubs, and grasses and by rehabilitating land along the trail which have been impacted by the old ıty road.

ve explanation under Part III describing the scope and level of impact. If the impact is unknown, explain why the unknown impact has not or can .

ve description addressing the items identified in 12.8.604-1a (ARM)
er the described impact may result and respond on the checklist. Describe any minor or potentially significant impacts.
sion about the issue in the EA narrative and include documentation if it will be useful.

PHYSICAL ENVIRONMENT

2. AIR Will the proposed action result in:	IMPACT				Can Impact Be Mitigated	Comme
	Unknown	None	Minor	Potentially Significant		
▸ a. Emission of air pollutants or deterioration of ambient air quality? (also see 13 (c))			X			A
b. Creation of objectionable odors?		X				
c. Alteration of air movement, moisture, or temperature patterns or any change in climate, either locally or regionally?		X				
d. Adverse effects on vegetation, including crops, due to increased emissions of pollutants?		X				
e.◆For P-R/D-J projects, will the project result in any discharge which will conflict with federal or state air quality regs? (Also see 2a)		X				
f. Other ___________		X				

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Air Resources (Attach additional pages of narrative if needed):

A. During construction a small amount of air pollution will likely occur.

Include a narrative explanation under Part III describing the scope and level of impact. If the impact is unknown, explain why the unknown impact has not
not be evaluated.

Include a narrative description addressing the items identified in 12.8.604-1a (ARM)

▸ Determine whether the described impact may result and respond on the checklist. Describe any minor or potentially significant impacts.

▸◆ Include a discussion about the issue in the EA narrative and include documentation if it will be useful.

L ENVIRONMENT

ER

proposed action result	IMPACT[a]				Can Impact Be Mitigated[a]	Comment Index
	Unknown[a]	None	Minor[a]	Potentially Significant		
rge into surface water or any surface water quality including ed to temperature, dissolved rbidity?		X				A.
in drainage patterns or the rate of surface runoff?			X			B.
of the course or magnitude of r other flows?		X				
n the amount of surface water in dy or creation of a new water		X				
of people or property to water ds such as flooding?		X				
the quality of groundwater?		X				
the quantity of groundwater?		X				
risk of contamination of surface r?		X				
ny existing water right or		X				
her water users as a result of n surface or groundwater		X				
her users as a result of any rface or groundwater quantity?		X				
J, will the project affect a dplain? (Also see 3c)		X				
J, will the project result in any vill affect federal or state water ns? (Also see 3a)		X				
______		X				

ion and Evaluation of the Cumulative and Secondary Effects on Water Resources (Attach additional pages of narrative if needed):

impact will occur.

P intends to reduce current run off by rehabilitating sections of the old county road which currently allow runoff to nto the Missouri river. By reducing the amount of pavement and planting native trees shrubs and grasses less runoff l occur.

ive explanation under Part III describing the scope and level of impact. If the impact is unknown, explain why the unknown impact has not or can d.

ive description addressing the items identified in 12.8.604-1a (ARM)

her the described impact may result and respond on the checklist. Describe any minor or potentially significant impacts.

sion about the issue in the EA narrative and include documentation if it will be useful.

PHYSICAL ENVIRONMENT

4. VEGETATION Will the proposed action result in:	IMPACT○				Can Impact Be Mitigated○	Cor Ir
	Unknown○	None	Minor○	Potentially Significant		
a. Changes in the diversity, productivity or abundance of plant species (including trees, shrubs, grass, crops, and aquatic plants)?			X			
b. Alteration of a plant community?		X				
c. Adverse effects on any unique, rare, threatened, or endangered species?		X				
d. Reduction in acreage or productivity of any agricultural land?		X				
e. Establishment or spread of noxious weeds?			X			E
f. ♦♦For P-R/D-J, will the project affect wetlands, or prime and unique farmland?		X				
g. Other: _______		X				

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

A. Minor impacts to the established vegetation in the area are expected. Since this area has been impacted through recreational use in the recent past the disturbance will be minor. Mitigation will be to reseed areas whic are disturbed and to enhance the area by planting native trees, shrubs and grasses on user developed trails in t immediate area.

B. Spread of noxious weeds may be increased during construction. This is being mitigated by use of mechanica chemical, and biological weed control methods where necessary to control noxious weeds. Region Four - FWP has a weed control plan and will adhere to the procedures outlined in that plan.

○ Include a narrative explanation under Part III describing the scope and level of impact. If the impact is unknown, explain why the unknown impact has not not be evaluated.

▸ Include a narrative description addressing the items identified in 12.8.604-1a (ARM)

♦ Determine whether the described impact may result and respond on the checklist. Describe any minor or potentially significant impacts.

♦♦ Include a discussion about the issue in the EA narrative and include documentation if it will be useful.

_ ENVIRONMENT

I/WILDLIFE proposed action result in:	IMPACT*				Can Impact Be Mitigated*	Comment Index
	Unknown*	None	Minor*	Potentially Significant		
ion of critical fish or wildlife habitat?		X				
in the diversity or abundance of game ird species?		X				
n the diversity or abundance of ecies?		X				
n of new species into an area?		X				
f a barrier to the migration or animals?		X				
ects on any unique, rare, r endangered species?		X				
conditions that stress wildlife limit abundance (including egal or illegal harvest or other)?			X		Yes	A.
D-J, will the project be performed in ich T&E species are present, and affect any T&E species or their see 5f)			X		Yes	B.
J, will the project introduce or cies not presently or historically e receiving location? (Also see 5d)		X				
______		X				

tion and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

ne project will increase human activity in an unknown amount. Mitigation includes improvement of habitat by planting
e shrubs, trees and grasses in the adjacent area and near the trail. This area is already heavily impacted by
ational use.

&E species present are Bald Eagles during the winter months. The relatively low human use during winter months
ave negligible impacts on the eagles. Current recreational use does not seem to effect the eagles.

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ve explanation under Part III describing the scope and level of impact. If the impact is unknown, explain why the unknown impact has not or can
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ve description addressing the items identified in 12.8.604-1a (ARM)
ner the described impact may result and respond on the checklist. Describe any minor or potentially significant impacts.
sion about the issue in the EA narrative and include documentation if it will be useful.

HUMAN ENVIRONMENT

6. NOISE/ELECTRICAL EFFECTS Will the proposed action result in:	IMPACT				Can Impact Be Mitigated	Con In
	Unknown	None	Minor	Potentially Significant		
a. Increases in existing noise levels?			X			/
b. Exposure of people to severe or nuisance noise levels?		X				
c. Creation of electrostatic or electromagnetic effects that could be detrimental to human health or property?		X				
d. Interference with radio or television reception and operation?		X				
e. Other: ____________		X				

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

A. The noise levels will be higher than normal during construction. After construction no impacts on the noise lev
the area are expected.

Include a narrative explanation under Part III describing the scope and level of impact. If the impact is unknown, explain why the unknown impact has not o
not be evaluated.

Include a narrative description addressing the items identified in 12.8.604-1a (ARM)
Determine whether the described impact may result and respond on the checklist. Describe any minor or potentially significant impacts.
◆ Include a discussion about the issue in the EA narrative and include documentation if it will be useful.

NVIRONMENT

USE roposed action result in:	IMPACT°				Can Impact Be Mitigated°	Comment Index
	Unknown°	None	Minor°	Potentially Significant		
of or interference with the or profitability of the existing land ea?		X				
with a designated natural area usual scientific or educational		X				
th any existing land use whose uld constrain or potentially roposed action?		X				
fects on or relocation of		X				
___________		X				

ption and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

ve explanation under Part III describing the scope and level of impact. If the impact is unknown, explain why the unknown impact has not or can
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ve description addressing the items identified in 12.8.604-1a (ARM)
ier the described impact may result and respond on the checklist. Describe any minor or potentially significant impacts.
sion about the issue in the EA narrative and include documentation if it will be useful.

HUMAN ENVIRONMENT

8. RISK/HEALTH HAZARDS Will the proposed action result in:	IMPACT[◊]				Can Impact Be Mitigated[◊]	Comme Index
	Unknown[◊]	None	Minor[◊]	Potentially Significant		
a. Risk of an explosion or release of hazardous substances (including, but not limited to oil, pesticides, chemicals, or radiation) in the event of an accident or other forms of disruption?			X			A.
b. Affect an existing emergency response or emergency evacuation plan or create a need for a new plan?		X				
c. Creation of any human health hazard or potential hazard?		X				
d. ♦For P-R/D-J, will any chemical toxicants be used? (Also see 8a)		X				
e. Other: ____________		X				

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

A. Weed control chemicals will need to be used to control the noxious weeds currently growing and anticipated t increase due to the project. Potential release of chemicals is always a concern. The Region Four Weed Manag Plan outlines chemical spill procedures which effectively reduce the possibility of release of chemicals into the environment.

◊ Include a narrative explanation under Part III describing the scope and level of impact. If the impact is unknown, explain why the unknown impact has not not be evaluated.

Include a narrative description addressing the items identified in 12.8.604-1a (ARM)

♦ Determine whether the described impact may result and respond on the checklist. Describe any minor or potentially significant impacts.

♦♦ Include a discussion about the issue in the EA narrative and include documentation if it will be useful.

NVIRONMENT

IUNITY IMPACT	IMPACT[a]				Can Impact Be Mitigated[a]	Comment Index
roposed action result in:	Unknown[a]	None	Minor[a]	Potentially Significant		
of the location, distribution, rowth rate of the human f an area?		X				
of the social structure of a		X				
of the level or distribution of or community or personal			X			A.
n industrial or commercial		X				
raffic hazards or effects on portation facilities or patterns of people and goods?			X			B.
______		X				

ption and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

he trail is at least partially being built to increase tourist opportunities in the Great Falls Area. If tourism does ase more tourist dollars will stay in the Great Falls area.

lore people will visit the trail and increased usage will be concentrated near the trail. Trail use will be p some nearby trailhead parking areas will likely be built in the future as the Giant Springs Management planning lds. In the event that additional parking is planned additional environmental review will be necessary. For the his EA there will be no significant impacts. Since the trail is for foot traffic only a significant increase in vehicular traffic ted.

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ive explanation under Part III describing the scope and level of impact. If the impact is unknown, explain why the unknown impact has not or can d.

ive description addressing the items identified in 12.8.604-1a (ARM)

her the described impact may result and respond on the checklist. Describe any minor or potentially significant impacts.

sion about the issue in the EA narrative and include documentation if it will be useful.

HUMAN ENVIRONMENT

10. PUBLIC SERVICES/TAXES/UTILITIES Will the proposed action result in:	IMPACT°				Can Impact Be Mitigated°	Com Inc
	Unknown°	None	Minor°	Potentially Significant		
a. Will the proposed action have an effect upon or result in a need for new or altered governmental services in any of the following areas fire or police protection, schools, parks/recreational facilities, roads or other public maintenance, water supply, sewer or septic systems, solid waste disposal, health, or other governmental services? If any, specify:			X			A
b. Will the proposed action have an effect upon the local or state tax base and revenues?		X				
c. Will the proposed action result in a need for new facilities or substantial alterations of any of the following utilities: electric power, natural gas, other fuel supply or distribution systems, or communications?		X				
d. Will the proposed action result in increased used of any energy source?		X				
▸ e. Define projected revenue sources						B
▸ f Define projected maintenance costs.						C.
g. Other:______________		X				

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

A. No increased services by police, emergency medical personnel, maintenance are anticipated.

B. Revenue Sources include: State Park Capital development monies; Federal ISTEA funding; City of Great falls fund monies; and privately raised funds generated though the Portage Route chapter of the Lewis and Clark Trail Foundation, the Heritage Park Commission and the Montana Wildlife and State Park Interpretive Association .

C. Projected maintenance costs are estimated at $1000 annually to be paid by FWP and operated in cooperation LCIC.

° Include a narrative explanation under Part III describing the scope and level of impact. If the impact is unknown, explain why the unknown impact has not not be evaluated

• Include a narrative description addressing the items identified in 12.8.604-1a (ARM)

♦ Determine whether the described impact may result and respond on the checklist. Describe any minor or potentially significant impacts.

♦♦ Include a discussion about the issue in the EA narrative and include documentation if it will be useful.

NVIRONMENT

THETICS/RECREATION	IMPACT[a]				Can Impact Be Mitigated[a]	Comment Index
roposed action result in:	Unknown[a]	None	Minor[a]	Potentially Significant		
of any scenic vista or creation of ally offensive site or effect that is ic view?			X			A.
of the aesthetic character of a r neighborhood?		X				
of the quality or quantity of r tourism opportunities and ach Tourism Report)				X.		B.
D-J, will any designated or l or scenic rivers, trails or eas be impacted? (Also see		X				
________		X				

ption and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

n designing the project aesthetic considerations were taken into account and the siting of the trail was planned to ance views, but there are still places where the park will be visually effected. By curving the trail and rehabilitating ons of the old county road bed FWP hopes to enhance the visual aspects of this portion of the park.

his project will result in increased recreation opportunities and tourism in both the park and in the Great Falls area. attached tourism report in appendices.

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ve explanation under Part III describing the scope and level of impact. If the impact is unknown, explain why the unknown impact has not or can

ve description addressing the items identified in 12.8.604-1a (ARM)
er the described impact may result and respond on the checklist. Describe any minor or potentially significant impacts.
ion about the issue in the EA narrative and include documentation if it will be useful.

HUMAN ENVIRONMENT

12. CULTURAL/HISTORICAL RESOURCES Will the proposed action result in:	IMPACT[°]				Can Impact Be Mitigated[°]	Comn Ind
	Unknown[°]	None	Minor[°]	Potentially Significant		
▸a. Destruction or alteration of any site, structure or object of prehistoric historic, or paleontological importance?			X			A.
b. Physical change that would affect unique cultural values?		X				
c. Effects on existing religious or sacred uses of a site or area?		X				
d. ♦♦For P-R/D-J, will the project affect historic or cultural resources? Attach SHPO letter of clearance. (Also see 12.a)		X				
e. Other: ____________		X				

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

A. This project will physically effect the Atkinson homestead site but is designed to help preserve the site and pre additional degradation of that site. No other the cultural sites nearby will be effected. Because the SHPO has n responded with any negative comments FWP assumes they concurred.

[°] Include a narrative explanation under Part III describing the scope and level of impact. If the impact is unknown, explain why the unknown impact has not not be evaluated.

- Include a narrative description addressing the items identified in 12.8.604-1a (ARM)

▸ Determine whether the described impact may result and respond on the checklist. Describe any minor or potentially significant impacts.

♦♦ Include a discussion about the issue in the EA narrative and include documentation if it will be useful.

NVIRONMENT

MARY EVALUATION OF :ANCE roposed action, considered e:	IMPACT[a]				Can Impact Be Mitigated[a]	Comment Index
	Unknown[a]	None	Minor[a]	Potentially Significant		
acts that are individually limited, but considerable? (A project or / result in impacts on two or more ources which create a significant considered together or in total.)		X				
ential risks or adverse effects certain but extremely hazardous if occur?		X				
conflict with the substantive of any local, state, or federal law, indard or formal plan?		X				
precedent or likelihood that with significant environmental e proposed?		X				
ubstantial debate or controversy re of the impacts that would be		X				
J, is the project expected to have osition or generate substantial ersy? (Also see 13e)		X				
)-J, list any federal or state d.		X				

tion and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

ve explanation under Part III describing the scope and level of impact. If the impact is unknown, explain why the unknown impact has not or can
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ve description addressing the items identified in 12.8.604-1a (ARM)
ner the described impact may result and respond on the checklist. Describe any minor or potentially significant impacts.
sion about the issue in the EA narrative and include documentation if it will be useful.

2. Description and analysis of reasonable alternatives (including the no action alternative) to the proposed action whenever alternatives are reasonably available and prudent to consider and a discussion of how the alternatives would be implemented:

No Action.

> This alternative would result in no connecting trail linking the Lewis anc Clark National Historic Trail Interpretive Center and developed portion of Giant Spring/Heritage State Park. The benefits of such a trail would not be achieved.
>
> The no action alternative does leave the park in with the old county roadbed which achieves many of the benefits of the trail system but without the added benefits of interpretive signing, trail rehabilitation, historic site preservation, visual enhancement and other trail rehabilitation.

Partial Trail to Lewis and Clark Interpretive Center.

> This alternative would allow a connection between the LCIC and the State Park and would not result in any impacts to most of the Park.. Future linkage to a trail system to the west of Giant Springs State Park would be more difficult.

Full paving of the entire trail.

> By paving the entire trail to the Atkinson Homestead with a 10' trail tread would achieve a high level of ADA compatibility. However, the impacts to the park would be high and the more primitive nature of the experience would be lost. The existing plan does comply with ADA standards and will allow additional paving if demand warrants it.

Project as proposed.

> The preferred alternative. This alternative would provide maximum benefit to the visitors to Giant Springs/Heritage State Park while having only minor environmental impacts to the entire area.

3. Evaluation and listing of mitigation, stipulation, or other control measures enforceable by the agency or another government agency:

> Foreseeable mitigation is rehabilitation of the soils and plant life disturbed or destroyed by construction and habitat improvement in the immediate area to mitigate for wildlife habitat lost due to trail construction and trail disturbance, plant community disruption and aesthetic considerations.

○ Include a narrative explanation under Part III describing the scope and level of impact. If the impact is unknown, explain why the unknown impact has n not be evaluated.

▸ Include a narrative description addressing the items identified in 12.8.604-1a (ARM)

♦ Determine whether the described impact may result and respond on the checklist. Describe any minor or potentially significant impacts.

♦♦ Include a discussion about the issue in the EA narrative and include documentation if it will be useful.

4. Based on the significance criteria evaluated in this EA, is an EIS required? If an EIS is not required, explain why the EA is the appropriate level of analysis for this proposed action:

An EIS is not required.

With no anticipated significant impacts to the environment or the public the EA is the appropriate level of analysis.

5. Describe the level of public involvement for this project if any and, given the complexity and the eriousness of the environmental issues associated with the proposed action, is the level of public nvolvement appropriate under the circumstances?

In 1995 this project was announced and a 30 day comment period was advertised. A public meeting was held on May 12, 1995 to determine the attitudes of the public about this project. No members of the public attended that meeting. Written comments were accepted for thirty days. No comments were received.

Since that time the scope of the trail has been expanded due to receiving ISTEA funding, additional cultural work has been performed and additional partners have been brought in. Because of this expansion in the project and the lack of public comments in 1995 it was decided to again prepare an EA and continue through an additional thirty day public comment period beginning September 22, 1999 with a public meeting scheduled for September 29, 1999. This is the Draft EA for that public comment.

All comments received from both the 1999 public comment periods will be addressed in the final version of the EA. All comments are included in the appendices.

This level of involvement is deemed appropriate a since the public has been an integral partner in this project from the start.

uration of comment period if any:

30 days from announcement.

ame, title, address and phone number of the Person(s) Responsible for Preparing the EA:

Dan Smith
Parks Operation Specialist
Region Four FWP
4600 Giant Springs Road
Great Falls, MT. 59405 (406)454-5840.

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e description addressing the items identified in 12.8.604-1a (ARM)
r the described impact may result and respond on the checklist. Describe any minor or potentially significant impacts.
on about the issue in the EA narrative and include documentation if it will be useful.

PROJECT QUALIFICATION CHECKLIST
HB 495

Date 8-4-99 Person Reviewing Dan Smith

Project Location: Giant Springs State Park

DESCRIPTION OF PROPOSED WORK: Construction of the Lewis and Clark Natural History Walk Trail across Giant Springs State Park Lands. This trail will be approximately 10 feet wide by .75 miles long.

The following checklist is intended to be a guide for determining whether a proposed development or improvement is of enough significance to fall under HB 495 rules. (Please check √ all that apply and comment as necessary.) Capital Construction projects - Prepared by D & C; Force Account Projects - Prepared by Region.

[x] A. New roadway or trail built over undisturbed land?

Comments: The entire trail will be constructed over disturbed lands. The nature of the site is that this area has been heavily modified by man's activities in the past but reclaimed by both natural invasion and by park management activities. The majority of this trail will be built on existing roadways.

[ ] B. New building construction (buildings < 100 sf and vault latrines exempt)?

[x] C. Any excavation of 20 c.y. or greater?

Comments: This project contains provisions for new trail construction in the west end of the park. This is the only excavation in the project. Whether this will exceed 20 c.y. is yet to be seen.

[ ] D. New parking lots built over undisturbed land or expansion of existing lot that increases parking capacity by 25% or more?

[ ] E. Any new shoreline alteration that exceeds a double wide boat ramp or handicapped fishing station?

[ ] F. Any new construction into lakes, reservoirs, or streams?

[ ] G. Any new construction in an area with National Registry quality cultural artifacts (as determined by State Historical Preservation Office)?

Comments: There are cultural artifacts in the general area but SHPO has determined that no significant impacts to those resources will occur. See attached MEPA checklist and SHPO clearance.

[ ] H. Any new above ground utility lines?

[ ] I. Any increase or decrease in campsites of 25% or more of an existing number of campsites?

[ ] J. Proposed project significantly changes the existing features or use pattern; including effects of a series of individual projects.

Comments: This Project not will significantly alter the existing use of the west end of Giant Springs State Park. It is already heavily used. It is anticipated that more people will use the trail and help reduce the number of user developed trails in heavily used riparian area.

IF ANY OF THE ABOVE ARE CHECKED, HB 495 RULES APPLY TO THIS PROPOSED WORK AND SHOULD BE DOCUMENTED ON THE MEPA/HB495 CHECKLIST. Refer to MEPA/HB495 Cross Reference Summary for further assistance.

➢ Include a narrative explanation under Part III describing the scope and level of impact. If the impact is unknown, explain why the unknown impact has no not be evaluated.

▸ Include a narrative description addressing the items identified in 12.8.604-1a (ARM)

♦ Determine whether the described impact may result and respond on the checklist. Describe any minor or potentially significant impacts.

♦♦ Include a discussion about the issue in the EA narrative and include documentation if it will be useful.

Appendix A
Cultural Resource Survey

United States
Department of
Agriculture

Forest
Service

Lewis & Clark NF

P.O. Box 869
Great Falls, MT 59403
406 791-7700
FAX 406-761-1972

Reply to: 2360

Date: August 25, 1997

Dr. Paul Putz
State Historic Preservation Office
P.O. Box 201202
Helena, MT 59620-1202

Dear Dr. Putz,

Enclosed please find a report which documents a cultural resource survey conducted near Giant Springs by Lewis and Clark National Forest heritage resource personnel. It is:

Giant Springs Interpretive Trail 97-LC-0-23

Two sites were recorded as part of the project. These are the Old Giant Springs Road (24CA627) and Atkinson Foundation (24CA628). A previously recorded site was tested (24CA112, Black Eagle Terrace Scatter). We have evaluated all three as ineligible to the National Register. They will be affected by the proposed trail, to varying degrees. Please review the enclosed reports to see if you concur with our evaluations of significance and effect.

The site forms are made available to your office pursuant to 36CFR800. Portions of the reports defining site location are exempt from mandatory disclosure according to 5USC552(b)(5). We request the reports not be released beyond the University of Montana SITS file and the State Historic Preservation Office nor used for other than the stated purpose.

Please call Kelly Keim, archeologist, at the Judith District (406-566-2292) if there are any questions.

Sincerely,

Gloria E Flora

GLORIA E. FLORA
Forest Supervisor

Enclosures: three site forms and an inventory report

cc: Montana Depart. of Fish, Wildlife, and Parks; Great Falls and Helena

Montana
Cultural Resource Annotated Bibliography System
DATA ENTRY FORM

OCUMENT NUMBER: CA | 01 | ____ REPORT DATE: 8 / 25 / 97
County code / File code / Report No. (*SHPO use only*)

UTHOR (Last, First, Middle Initial, et al): Keim, Kelly

TLE: Giant Springs Interpretive Trail

ENCY: 27 OTHER AGENCIES: (1) ____ (2) ____ OTHER COUNTIES: (1) ____ (2) ____

ENCY DOCUMENT/PROJECT NO: 97-LC-0-23 SURVEY ACRES: 14.5

CUMENT TYPE:
[✓ 1. Inventory/Evaluation]
____2. Mitigation/Excavation
____3. Overview
____4. Other

YWORDS: (*SHPO use only*) (1) ____ (2) ____ (3) ____
____ (5) ____ (6) ____ (7) ____

INVENTORY LOCATION

T	R	S
21N	4E	32
21N	4E	33

PROPERTIES

	Site Number	Property/Site Name
1.	24CA627	Old Giant Springs Rd
2.	24CA628	Atkinson Foundation
3.	24CA112	Black Eagle Terrace Scatter
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		

to inventory report and send to: State Historic Preservation Office, Montana Historical Society, 225 North Roberts

CULTURAL RESOURCE INVENTORY
OF THE
GIANT SPRINGS INTERPRETIVE TRAIL

97-LC-0-23

REPORTED BY:

Archaeologist — Date: 8.25.97

Reviewed and Approved by:

/s/ Richard Newton
FOREST ARCHAEOLOGIST — DATE: 8/25/97

RESULTS:

CULTURAL SITE(S) RECORDED new: Old Giant Springs Road (24CA627) and Atkinson Foundation (24CA628), previously: Black Eagle Terrace Scatter (24CA112).

POTENTIAL IMPACT TO CULTURAL SITE(S) All three sites will be affected by trail development. They have been evaluated as insignificant and no avoidance or mitigation are recommended.

TYPE OF PROJECT Recreation (Partnership)

APPROVED BY: ______________________ DATE: 8/27/97
FOREST SUPERVISOR

✓ I AGREE WITH RECOMMENDATIONS AS STATED HEREIN.
____ I OFFER THE FOLLOWING MANAGEMENT RECOMMENDATIONS:

SHPO CONCURRENCE (letter date) ______________________

ENTERED ON ATLAS (initials and date) ________

USDA FOREST SERVICE

CULTURAL RESOURCE INVENTORY REPORT

PART A - GENERAL INFORMATION

1. PROJECT TITLE: Giant Springs Interpretive Trail, 97-LC-0-23

2. AUTHOR AND REPORT DATE: Kelly Keim, 8/25/97

3. ADMINISTRATIVE DATA: STATE Montana COUNTY Cascade

REGION 1 FOREST Lewis & Clark DISTRICT n.a.

4. LOCATION OR LEGAL DESCRIPTION: The project area is along the Missouri River above Giant Springs. It includes the old Giant Springs Road and terraces southwest of the new Lewis and Clark Interpretive Center. Legals are T21N, R4E, Sec. 32: S 1/2 of the SE: and Sec. 33: SE of the NW and W 1/2 of the SW. See the attached topo map.

5. AREA INVOLVED: TOTAL PROJECT ACREAGE 14.5

MILES NEW TRAIL CONSTRUCTION .3 * MILES TRAIL RECONSTRUCTION 1.0**

NUMBER OF PARCELS/UNITS 1 ACRES ACTUALLY IMPACTED 4.2

* user-developed hiking trail upgraded to 6-7' wide packed gravel trail.

** asphalt road converted to 8' wide asphalt trail, handicapped accessible.

6. APPROPRIATE USGS TOPOGRAPHIC MAP: Great Falls NE, 7.5', 1965

7. OTHER MAPS USED: Lewis and Clark Forest Visitor's Map (1/2" to mile)

8. AERIAL PHOTOGRAPHS USED: unavailable

9. DESCRIPTION OF THE PROPOSED UNDERTAKING (DESCRIBE DIRECT AND INDIRECT IMPACTS EXPECTED): The project involves converting a mile of abandoned road and .3 miles of user-developed trail into an interpreted hiking/biking trail. An 8' wide meandering trail will be defined within the bed of the old asphalt road (24CA627) and the rest of the road bed will be torn up and revegetated with native riparian species. Parts of the old road are bordered by a rock retaining wall which won't be disturbed. A culvert or decking will be installed to drain a shallow coulee at the northeast end of the old road.

Southwest of the old road the user-developed trails and two-tracks cross a broad terrace and head up the Missouri. About 1,100' of a two-track and trail will be widened to 7'. It will be gravelled and handicapped-accessible from the junction with the paved segment that was the old road, southwest across the terrace. Where it drops off the terrace and borders the river's edge, another 600' of the existing segment will be widened to 6' but won't be gravelled or handicapped accessible.

A backhoe will rip up extraneous segments of asphalt from the road. A bobcat or trail builder will upgrade the existing two-track and trail. Between 5-10 interpretive signs will be installed along the new trail. Impacts along the asphalt stretch will be up to 30' wide. Impacts along the unpaved stretch will be up to 15' wide. Depths of disturbance will range from 1-3 feet. Indirect impacts might include changes in vegetation and water run-off patterns, increased traffic through the area, and the effects that would bring like new user-developed trails and increased litter.

10. GENERAL ENVIRONMENTAL DESCRIPTION: The setting is a riparian zone along the Missouri River between Black Eagle and Rainbow Dams, below Great Falls. Area elevations range from 3200' at Giant Springs to 3350' on the upland bench near the southwest end of the project. Currently, the area attracts recreational hikers and bikers. The big terrace at the southwest is criss-crossed with user-developed two-tracks and trails and appears to have been hayed or plowed in the past. Vegetation includes willow, cottonwood, currant, wild rose, yucca, scarlet globemallow, scarlet gaura, salsify, clump grasses, and crested wheat. Historically, the area supported elk, deer, bison, bear, pelicans, fish, and raptors.

11. PREVIOUS ARCHEOLOGICAL/HISTORICAL STUDIES: Other cultural resource inventories and sites documented for the area include five archaeological surveys and thirteen test units conducted at 24CA1006, a Besant occupation and workshop; 24CA268, a dismantled smelter; 24CA617 and 24CA333, a historic railroad and residence associated with a smelter; 24CA111, a prehistoric habitation and workshop; 24CA112, a lithic scatter; 24CA604, a railroad; and 24CA620, a historic conservation and recreation site. This information is from Forest Service and State Historic Preservation Office files. Of the sites named above, only 24CA112 is inside the proposed impact area.

12. EXPECTED AREAS OF CULTURAL SENSITIVITY (CITE PREVIOUS STUDIES WHENEVER POSSIBLE): The setting includes Giant Springs, the Missouri River, terraces, and bluffs. Site probability was thought to be high.

PART B - FIELD EXAMINATION

1. SUMMARY OF AREAS INVOLVED:

PERCENT OF IMPACT ACREAGE COVERED 100%

MILES NEW TRAIL SURVEYED .3 *

MILES RECONSTRUCTED TRAIL SURVEYED 1 **

NUMBER OF UNITS SURVEYED 1

TOTAL ACRES SURVEYED 5

+

NUMBER OF SPOT-CHECKS n.a.

TOTAL MILES SURVEYED 1.3

* to be upgraded from user-developed two-track or trail.

** abandoned road to be converted to a trail.

2. AREAS EXAMINED AND TYPE OF COVERAGE (KEY TO MAP): Tammy Cherullo and John Dolan covered the road and upper terraces at the south end of the project area on 12/5/95, in preparation for recording the road. Richard Newton, Kelly Keim, other Forest personnel, and MT Fish, Wildlife, and Parks personnel walked the old road and lower southwest terraces on 5/14/97; and Keim and Cherullo covered the staked route of the proposed trail and southwest terraces on 7/9/97. Five shovel probes were dug on or near the proposed route to test the extent of 24CA112.

3. AREAS NOT EXAMINED: n.a.

4. REASONS NOT EXAMINED: See above.

5. PERSONNEL CONDUCTING OR ASSISTING IN THE SURVEY: See item B2 above.

6. DATE OF SURVEY: see item B2 above

7. TIME SPENT: TOTAL SURVEY/TESTING TIME 20 TRAVEL 6 ADMIN. 80 hrs (includes estimate of road research done in late 1980s).

8. SURFACE VISIBILITY (%) IN EACH AREA: Much of the project area is an old asphalt road and retaining wall beside the river. Where the project crosses terraces, surface visibility was good (30-60%) due light grass cover and occasional unvegetated patches.

. SUBSURFACE VISIBILITY: This was also good across the terrace due to wo shallowly eroded two-tracks and several user-developed trails.

0. SPECIAL PROBLEMS ENCOUNTERED: Judging from the presence of roads, rails, and litter, it's likely any exposed diagnostic artifacts have

been collected. It's also possible parts of the southwest terrace were hayed or plowed - a sod layer was generally absent, native forbs were minimal, and crested wheatgrass was dominant.

PART C - RESULTS

1. CULTURAL RESOURCES RECORDED (ATTACH USFS SITE INVENTORY SHEETS AND KEY TO MAPS):

FIELD NO.	USFS NO.	STATE NO.	TYPE OF SITE
newly recorded:			
Old Giant Springs Road		24CA627	road
Atkinson Foundation		24CA628	historic occupation
previously recorded:			
Black Eagle Terrace		24CA112	lithic scatter
Giant Springs Site		24CA1006	prehistoric occ.
City Limits Site		24CA111	prehistoric occ.

2. CULTURAL RESOURCES NOTED BUT NOT FORMALLY RECORDED (KEY TO MAPS):

FIELD NO.	GENERAL DESCRIPTION	REASONS NOT RECORDED
	broken glass, mainly from beer bottles and car windows	scattered litter associated with two-tracks
	user-developed two-tracks	short tracks from river road to river bank.

3. FEDERAL REGISTER CHECKED: yes NEGATIVE x____ POSITIVE ____

4. GENERAL LAND OFFICE PLATS CHECKED: Notes in the project file indicate the GLO plat showed 'no pertinent information'. Plats on file at the Cascade County Courthouse plat room were checked, as were Cascade County Historical Society records and maps of the area. Findings are documented in site forms for the Old Giant Springs Road (24CA627) and Atkinson Foundation (24CA628).

5.COMMENTS/CONCLUSIONS (POSSIBLE IMPACTS, AVOIDANCE OF IMPACTS, RELATION OF SITES TO PROJECT): The proposed trail will impact three sites: the old Giant Springs Road (24CA627), the Atkinson Foundation (24CA628), and Black Eagle Terrace Scatter (24CA112). The road will be converted to a narrower interpretive trail and parts of it will be torn up. The new trail will extend beyond the road also, bordering the foundation site and crossing the terrace site. All three sites have been evaluated as ineligible to the National Register so no avoidance or mitigation are recommended.

Two other sites were previously recorded near the project but outside the impact area. These are the Giant Springs Site (24CA1006) and the City Limits Site (24CA111). They won't be affected by this trail.

6. CERTIFICATION OF RESULTS:

I hereby certify that I conducted the Cultural Resource Inventory reported here, that my observations and methods are fully documented and that this report is complete and accurate to the best of my knowledge:

Kelly Kemm
Name of Reporter

8.25.97
Date

DETERMINATION OF SIGNIFICANCE AND EFFECT

A cultural resource Investigation (97-LC-0-23) has been conducted for the proposed Giant Springs Interpretive Trail project and cultural values have been identified. Based on the attached report, the Forest Service has made the following determination:

CULTURAL SIGNIFICANCE (Scientific potential, unless otherwise noted)

Total number of cultural properties: newly recorded: 2; previously recorded: 3.

Class I (eligible) properties: 0

Class II (unevaluated) properties: 24CA111 (City Limits Site)

Class III (insignificant) properties: 4: 24CA627 (Old Giant Springs Road), 24CA628 (Atkinson Foundation), 24CA112 (Black Eagle Terrace Site), and 24CA1006 (Giant Springs Site).

EFFECT

1. There will be no effect to Class I or II cultural properties because:

   - [ ] They are outside the general project area-
   - [x] They are outside of project impact areas- 24CA111
   - [ ] Final project plans will avoid these areas-
   - [ ] The portion of the site involved does not contain significant values in jeopardy-
   - [ ] The nature of the activities is such that there will be no effect to sites present-

2. Class I or II properties subject to no adverse effects: [x] None

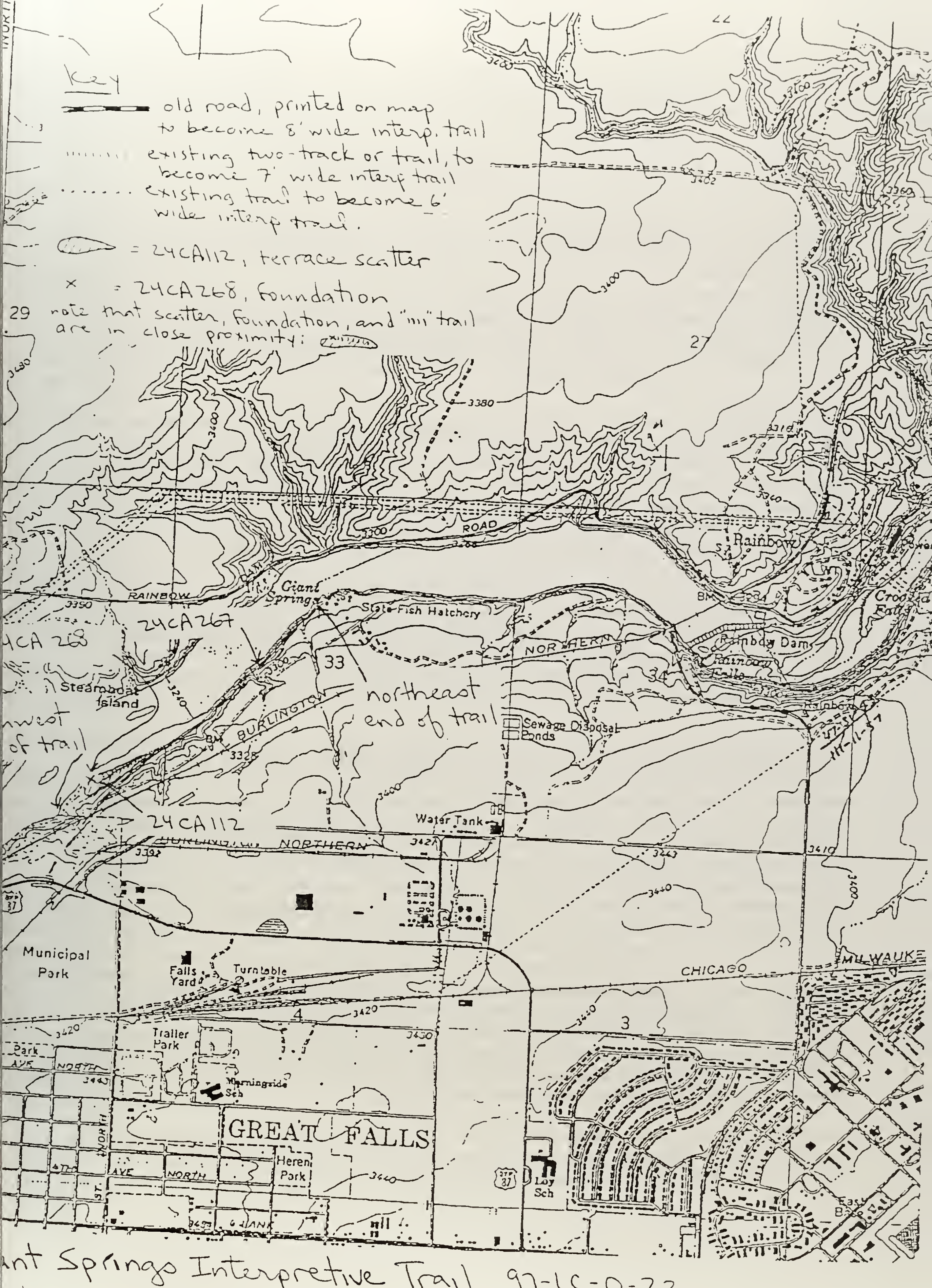
3. Class I or II properties subject to beneficial effects: [x] None

4. Class I or II properties subject to adverse effects: [x] None

COORDINATING REQUIREMENTS

THE FOLLOWING ACTIONS ARE RECOMMENDED TO ENSURE THE PROTECTION OF KNOWN AND UNKNOWN SITES:

In the event that cultural materials are encountered during land alteration activities or if sale plans change, the Forest Archaeologist should be notified immediately.



nt Springs Interpretive Trail 97-LC-0-23
at Falls NE Quad, 7.5', 1965 1:24,000

File: 97-LC-0-23

CULTURAL SITE RECORD

SITE NAME: Old Giant Springs Road SITE NUMBER: 24CA627
MAP: USGS Great Falls NE Quad, 7.5', 1965
COUNTY: Cascade
CONTOUR: SW end: 3300', NE end: 3200'
MERIDIAN: Principle T21N, R4E, Section 32: SE; Sec. 33: W 1/2;
U.T.M.G.: Zone 12; SW end: 481565 mE/ 5263310 mN; NE end: 482700 mE/ 5264390 mN

SITE LOCATION: The road linked Giant Springs with Hwy 87/River Drive at the northeast edge of Great Falls, MT. It ran along the edge of the river at a distance of 0 to 20 meters from the water. The road begins approximately 20 meters southwest of Giant Springs (two kilometers upstream of Rainbow Dam) and runs approximately 3 kilometers to the southwest. The masonry wall also begins approximately 20 meters southwest of Giant Springs but runs only 500 meters southwest.

ACCESS: The site is located 2 kilometers northeast of Great Falls and approximately 400 meters west of the State Fish, Wildlife, and Parks (FWP) complex. The FWP address is 4600 Giant Springs Road. To reach the northeast end, walk 20 meters upriver from the main spring at Giant Springs State Park.

SITE DESCRIPTION: The site consists of the old Giant Springs Road and masonry retaining wall. The road runs approximately 3 kilometers to the southwest. The rock wall runs for 500 meters beginning about 20 meters southwest of the Giant Springs. It begins at or just below the water level and rises up one or two meters to the level of the road. The rock wall is located immediately adjacent to the Missouri River. It protects the road from the erosive action of the river where the road is located only a meter or two above the water and within a few meters of the river's edge.

HISTORY: The old Giant Springs Road once linked Great Falls with the Springs. Road work was started by the WPA in 1934 and continued into 1936. It was described as an 'oiled road' in 1947 and was designated as a Federal Aid Secondary Road. However, in the early 1970s, vehicle access was cut off and rerouted along a new road on the bench above the river and the old road is no longer maintained.

The rock work may have been built with the road, no actual construction date was found. It was apparently done about the same time as the WPA rock work at Giant Springs and along the road near Mitchell Pool (near

Central Avenue West Bridge). It is most similar to the rock wall nants by the Giant Springs Fish Hatchery intake area. All of the top the side, in places, have been covered with reinforcing concrete in years following its construction.

E TYPE: road

HISTORIC NAME: Giant Springs Road

ENSIONS: 3 km x 5 m
MATED AREA: 15,000 square meters

RIBE THE METHOD USED TO DETERMINE SITE EXTENT AND BOUNDARIES: A strian survey of the land surface was used to determine the site nt and boundaries.

H OF CULTURAL DEPOSIT: The site is surficial only

RAL ENVIRONMENTAL DESCRIPTION:

gy: limestone

raphy: The site is located along the river bank of the Missouri . The river bed is 20 to 50 meters lower in elevation than the unding plateaus as a result of erosion. The slopes next to the in the vicinity of Giant Springs vary from 0 to 40 degrees.

ation: Vegetation consists of grasses, mullein, cottonwood, green and willow.

ife: Canadian geese, pelicans, deer, beaver.

WATER:
stance: 0-200 meters
rection: Water is located northwest of the road
ture of water source: Missouri River

ODIFICATIONS: Scant records on the road indicate the road and wall aintained between 1936 and the early 1970s when the route was ned. A Great Falls Tribune article from 7/6/47 describes the tion of maintenance interrupted by WWII. It was an oiled road nd reconstruction was going to involve "much tearing up of the old remixing and relaying of the oil surface". Wall maintenance ed the addition of superficial layers of concrete to the entire d the exposed side in places. Blocky rip rap rocks were randomly d below the wall, in the river where the water was damaging the See the attached photo.

Springs Heritage Park Advisory Committee member thought the road ndoned in the early 1970s. Both the road and wall have rated naturally. For the south half of the route, asphalt pavement has decayed and the gravel of the road matrix is loose. Wall segments have fallen onto rip rap or into the river.

FEATURES: The site consists of a roadway and rock retaining wall. The road is a narrow two-lane road without shoulders. The northeast end is still topped with asphalt, the middle segment shows traces of asphalt scarred by heavy equipment, and the southwest end has deteriorated to gravel. No evidence of painted center or shoulder lines remains on the pavement.

The rock wall consists of blocky native rocks, mortar, and a rounded concrete top that was added sometime after the wall was finished. In places the concrete covers the exposed side of the wall. Height ranges from one to two meters high, level with the road surface.

PREVIOUS STUDY: none known

SOURCES CHECKED AND RESULTS FOUND: The General Land Office Plat was reviewed and contained no pertinent entries. The following sources were checked for information pertaining to the old road: Cascade County Road Department, County Surveyor's Office, the State Hwy. Department, Great Falls and Cascade County Clerks and Recorders, and the Great Falls Tribune. Individuals including Giant Springs Park designer Tom Lease, Montana Department of Fish, Wildlife, and Parks (FWP) heritage specialist Paul Valle, and others were called. Forest engineers' files for the new Lewis and Clark Interpretive Center were checked also, since the new Center borders the old road. These sources yielded the background information in this report.

No entries for the site area are listed in CRATS.

Other cultural resource inventories and sites documented for the area include: five archaeological surveys and thirteen test units conducted at 24CA1006, a Besant occupation and workshop; 24CA268, a dismantled smelter; 24CA617 and 24CA333, a historic railroad and residence associated with a smelter; 24CA111, a prehistoric habitation and workshop; 24CA112, a lithic scatter; 24CA604, a railroad; and 24CA620, a historic conservation and recreation site. This information is from Forest Service and State Historic Preservation Office files.

CULTURE HISTORICAL INFERENCES: The road was built by the WPA to link Great Falls with Giant Springs, a park on a terrace of the Missouri River just downstream from Great Falls. When it was built, it was a county road but now it's within city limits. It was abandoned in the early 1970s when a new road was built along the uplands as part of improvements made at Giant Springs Park.

ARENT SIGNIFICANCE OF SITE: Criterion A of 36 CFR 60.4 addresses
nificance based on association with historically important events or
erns of development. This short road is associated with the WPA, an
cy know for certain patterns of Depression-era developments. Road
wall integrity have been compromised though. Over time, concrete
layered over the rock retaining wall in many places and rip-rap was
ked in front of it. Then, after the road was closed, the junction
Hwy 87/River Drive and also the northeast end at the springs were
up, maintenance along the remaining segment was discontinued, and
southwest half of the route disintegrated completely. WPA features
been altered and the site fails to convey the significance of their
lopments.

erion B which addresses significance based on ties to important
iduals doesn't apply to the road.

rion C addresses significant architectural or construction
res. The salient design feature, the rock wall, is an example of
ock work but more distinctive examples with more integrity can be
elsewhere in Great Falls at Giant Springs pool, the hatchery
ays, and the Mitchell Swimming Pool road. Road retaining wall
nts are missing or collapsed and remaining portions have been
ed with concrete and obscured by rock rip-rap similar to the rocks
wall. The historical integrity of the retaining wall has been
usly compromised and doesn't qualify under this criterion.

ion D addresses significance based on potential to yield
ically important information. The site was field-checked and
raphed. Road and retaining wall characteristics are recorded here
e route is shown on various maps over time. Numerous sources were
d for information on road history. These revealed basic
ation - the WPA built it between 1934-1936, it was a "Federal Aid
ary Road", and maintenance on the road and wall was done regularly
that, until the 1970s. It's unlikely further research or
tion of the road would yield more information. Criterion D
icance doesn't apply to this site.

L REGISTER STATUS: ineligible

AL IMPACTS TO SITE AND/OR ITS INTEGRITY: The Forest Service is
with FWP to convert the old road into an interpretive trail from
prings to the new Lewis and Clark Interpretive Center. Proposals
either creating a trail that meanders slightly on and off the
d or merely narrowing the old road. Both of these would involve
up portions of old asphalt, adding handrails where necessary,
ing benches, interpretive signs, and a culvert. The wall will
removed. These changes would impact what remains of the old road
e it has been evaluated as ineligible to the National Register,
ance or mitigation are recommended.

COMMENTS:

OWNER: Montana Department of Fish, Wildlife, and Parks

PHOTOGRAPHS: Eight black and white prints were taken. These include four overviews, three shots of the wall, and one shot of deteriorating pavement.

PHOTO REPOSITORY: Supervisor's Office, Lewis and Clark NF,
1101 15 Street North, Great Falls, MT 59404

PHOTO CATALOG NUMBERS: S.O. Roll 12/5/95

SITE RECORDER(S): Kelly Keim, Cynthia Manning, John Dolan, and Tammy Cherullo, all of Lewis and Clark Heritage Resource Staff

DATE: 12/7/90, 12/8/95, and 5/14/97

LIST OF ATTACHED DOCUMENTS: photo pages and topo map

ENTS:

R: Montana Department of Fish, Wildlife, and Parks

OGRAPHS: Eight black and white prints were taken. These include
overviews, three shots of the wall, and one shot of deteriorating
ment.

PHOTO REPOSITORY: Supervisor's Office, Lewis and Clark NF,
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RECORDER(S): Kelly Keim, Cynthia Manning, John Dolan, and Tammy
llo, all of Lewis and Clark Heritage Resource Staff

12/7/90, 12/8/95, and 5/14/97

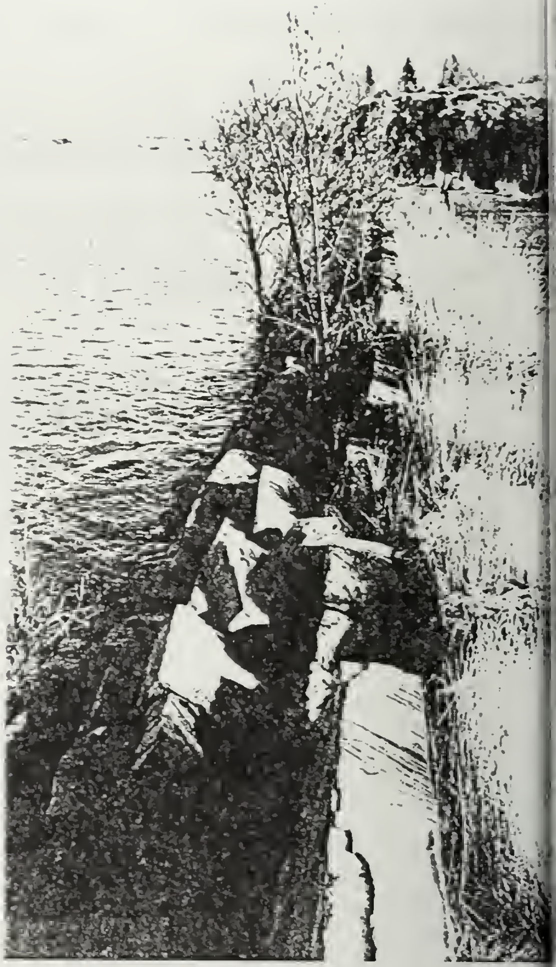
OF ATTACHED DOCUMENTS: photo pages and topo map

Old Giant Springs Road

24CA267 97-LC-0-23

Overview, south end of road to S.W.

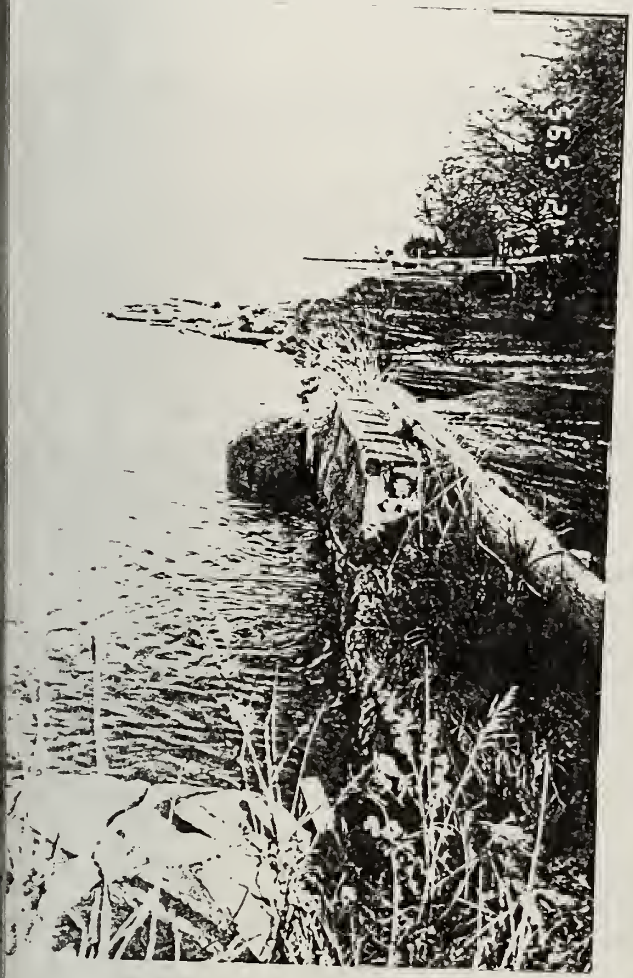
To n.e.
North end of road.
[illegible] vertical, slu
most basalt rocks are



south end of road, to S.W.

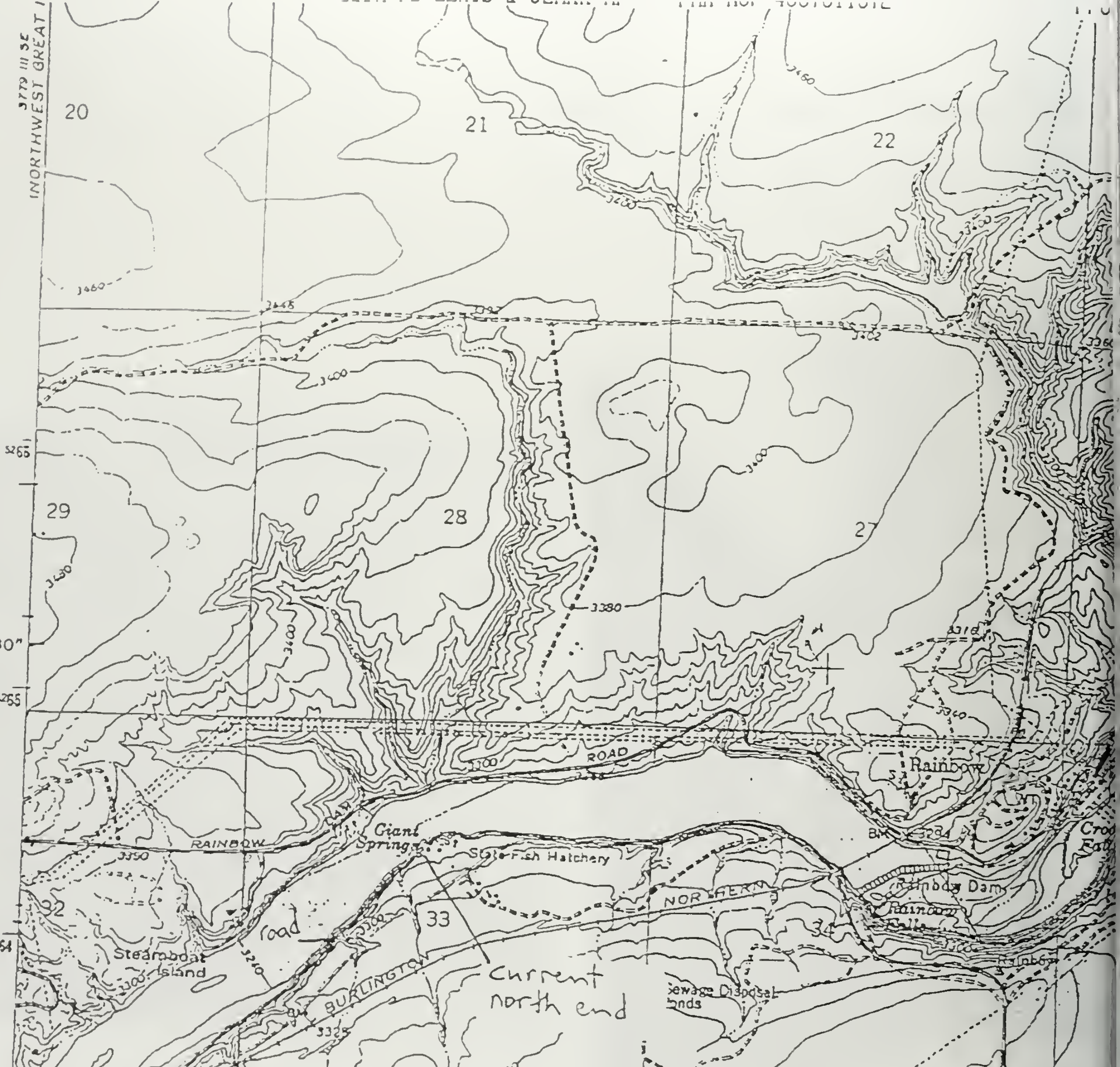
photo page 1 of 2

Old Giant Springs Road
24CA267 97-LC-0-23



Northeast end of road and rock wall. Note wall cross section and missing segment.

To n.e.



Old Giant Springs Road 24CA627
97-LC-0-23

Great Falls NE Quad
7.5', 1965, 1:24,000

File #: 97-LC-0-23

CULTURAL SITE RECORD

) #: Black Eagle Terrace STATE #: 24CA112
Great Falls NE, 7.5', 1965 AERIAL PHOTO: not available
Y: Cascade CONTOUR:> 3240' ; < 3280' ;x 3260' feet + Msl
AN:________ T 21 N, R 4 E , SE 1/4 of SE 1/4, Sec 32
I.G.: Zone ________ ; 482680 mE/ 5263530 mN
LONG. (optional):____° ____' ____"W Long/____° ____' ____"N Lat.

TYPE: lithic scatter, previously recorded

LOCATION: The site is on the Missouri River just northeast of Great Falls,
na. It's on a southeast terrace about .7 miles upriver from Giant
gs. A detailed legal location is T21N, R4E, Sec. 32, N 1/2 and SW of the
the SE.

S: From the Great Falls office of Montana Department of Fish, Wildlife,
arks, drive southwest on the new Giant Springs Road .7 miles to the
ned roadside parking area. Hike the old road down to the northeast end of
errace and find the site on the terrace between the two islands.

DESCRIPTION: It's a sparse prehistoric occupation on a terrace on the
east bank of the Missouri River between Great Falls and Giant Springs.
Aaberg recorded it as 24CA112, the Black Eagle Terrace lithic scatter in
He described it as a "light" lithic scatter exposed in road ruts. He
ed an obsidian biface, lithic debris, bone fragments, and fire-cracked
See his site form, attached. It was resurveyed and tested in 1997 to
effects of a proposed interpretive trail across the terrace. Artifacts
ered during testing were limited to historic glass. User-developed
and litter on-site indicate the site is visited by hikers, bikers, and
men. It's likely some of them have collected diagnostic artifacts, if
cts became exposed.

ES: none noted in 1978 or in 1997.

CTS: noted on 5/14/97: one fire-cracked rock, one chunk of fused-grain
ite (not collected), one square-shafted spike (collected). Nothing was
on 7/9/97. Five shovel probes were dug across the terrace then. They
ed 36.6 cm in diameter by 39.2 cm deep and yielded only glass and scrap
(described below).

SHOVEL PROBES: On 7/9/97 five probes were dug to sample subsurface deposits, evaluate site significance, and assess effects of the proposed trail. All material was screened through 1/4" mesh and recovered artifacts were collected. See the attached scale map for probe locations.

Probe 1: 36 cm diameter, 42 cm bs. Found: bright green glass fragment from surface, two clear fglass fragments from 10-15 cm bs (one stamped '...AN'). Soil is brown sndy loam with a orange and white lens at 23 cm bs. Dug in track of grassy abandoned two-track.

Probe 2: 37 cm diameter, 37 cm bs. Found: a scrap of metal, two pieces of brown glass and one piece of aqua glass that may be a car window fragment. Dug in the 3 square meter area where a quartzite chunk, a piece of fire-cracked rock, and a historic spike were found by the author on 5/14/97. Soil: medium brown sandy loam.

Probe 3: 36 cm diameter, 40 cm bs. Found: six glass fragments (three clear, one aqua, two brown - one of these is stamped with the logo of Owens-Illinois Pacific Coast Co. 1932-1943). This probe was seven feet north of a historic feature recorded as the Atkinson Foundation immediately southwest of the area Aaberg defined as the lithic scatter. Soil: sod 0-7 cm bs, medium brown sandy loam 7-40 cm bs, occasional charcoal 17-40 cm bs, thought to be from a grass fire.

Probe 4: 37 cm diameter, 39 cm bs. Nothing cultural found. Soil: reddish-brown silty clay with few pebbles. Dug in track of grassy two-track.

Probe 5: 36 cm diameter, 42 cm bs. Nothing cultural found. Soil: medium brown sandy clay. Dug in track of user-developed trail.

GEOMORPHOLOGIC AND SEDIMENTARY CONTEXT: The site is set on lower terraces on the southeast bank of the Missouri River. Sod development appeared to be absent across the terrace and about 30% of the ground surface was visible through the grass. Distinct sedimentary layers were minimal and not consistent across the terrace. Native grasses and forbs were also minimal although currant bushes were abundant. It's possible the terrace was hayed or plowed in the past, except for the area close to the foundation just southwest of the scatter.

SITE SIGNIFICANCE: 36 CFR 60.4 A addresses significance based on association with historically important events or patterns of development. Aaberg's original site form listed the cultural affiliation as 'unknown prehistoric'. No additional information has been learned since then linking the site to a more specific event or pattern. The site doesn't qualify under criterion A.

Criteria B and C apply to significance based on an important person or architectural style. These don't apply to the scatter.

Criterion D applies to significance based on potential to yield historically important information. Five shovel probes were dug on the terrace but none yielded any prehistoric artifacts. Nor were any seen that day although the terrace was surveyed intensively as part of testing. Surface and subsurface bility were fair to good. It appears the site is very sparse and nostics, if present, have been collected. Informational potential appears disqualifying the site under Criterion D.

OSED IMPACTS: The Lewis and Clark Forest and the Montana Department of , Wildlife, and Parks propose to develop an interpretive trail from Giant ngs to the uplands above Black Eagle Terrace, via the old Giant Springs and the terrace. The route across the terrace follows an abandoned track and an existing user-developed trail. Upgrading the existing route involve some cutting and filling and the addition of gravel or asphalt ; the route through the terrace. The upgraded trail will tie in with other opments in the general area and could result in an increase in foot and traffic across the site. This, in turn, could result in an increased risk rface disturbances and collecting on-site. However, the site has been ated as insignificant so no avoidance or mitigation are recommended.

GRAPHS: S.O. Roll 6-7/97, frames 17 and 18: area of shovel probe 5; 19-22: overviews.

DUM RECORDERS: Kelly Keim and Tammy Cherullo, Lewis and Clark National archeologists

7/9/97

MENTS: Scale map of site, topo map of area, and Steve Aaberg's original orm.

MONTANA STATE UNIVERSITY

CULTURAL SITE FORM

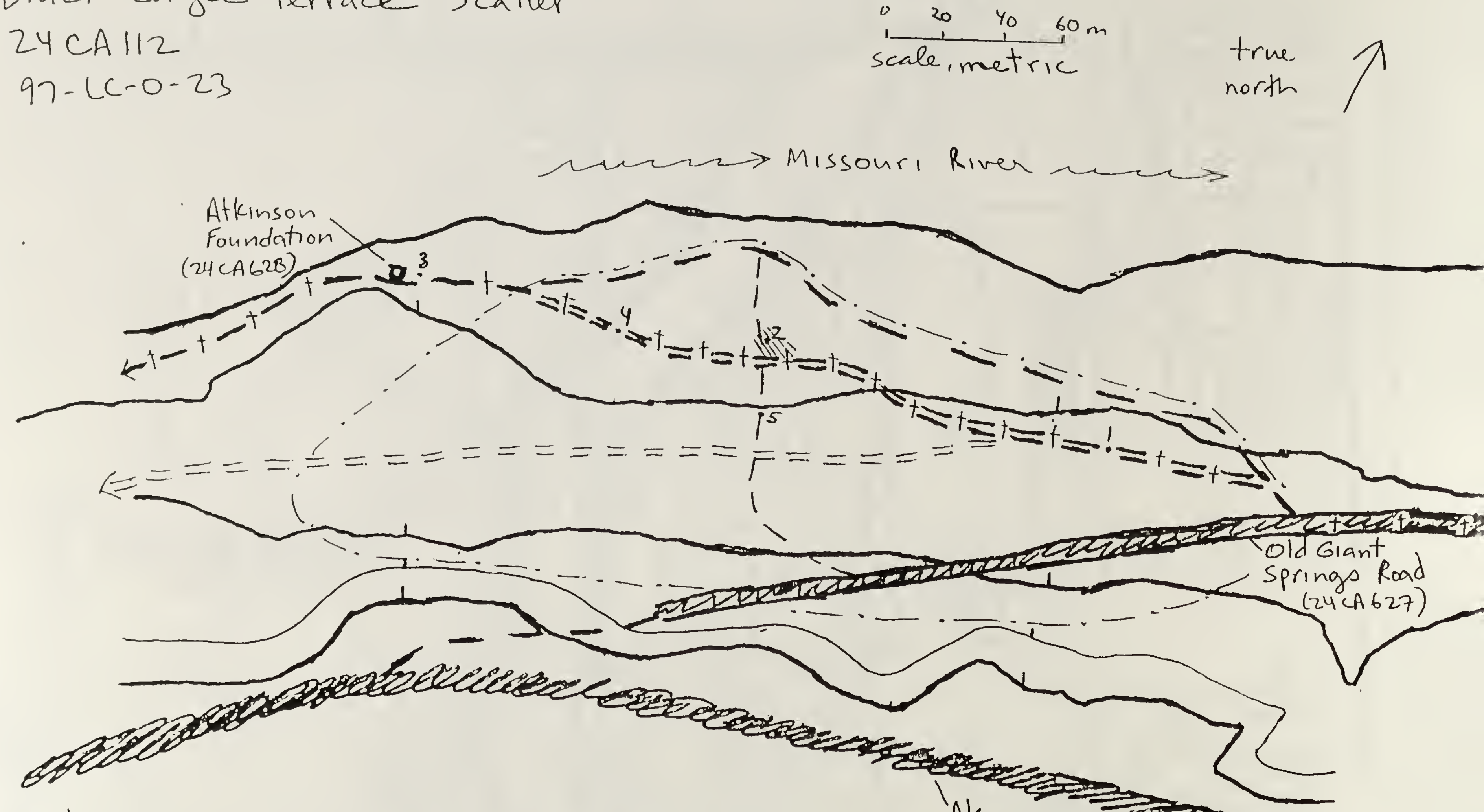
Site Name: Black Eagle Terrace State No.: 24CA112

State: Montana County: Cascade

2. Type of Site: Habitation
3. Cultural Affiliation: Unknown Prehistoric
4. Location: site lies on the south side of the Missouri River about 1 mile southwest of Giant Springs. SE 1/4, Sec. 32, T21N, R4E.
10. Site Description: site consists of a light scatter of lithic debris, fire-cracked rock, and bone fragments. The cultural materials were exposed in road ruts. Although no stratum could be seen in the cut bank exposures, there could be buried cultural deposits in the terrace.
11. Position of Site and Surroundings: The Missouri River runs by the north side of the site. Steep slopes rise along the south side of the site. Black Eagle Island lies about 450 m upstream.
12. Area of Occupation: 5 acres
13. Depth and Character of Fill: alluvium and colluvium, unknown depth.
14. Present Condition: some trails cut across the site.
16. Material Collected: one obsidian biface
17. Material Observed: lithic debris, bone fragments, and fire-ckracked rock.
19. Recommendations for Further Work: subsurface testing

Recorded by: Steve Aaberg Date: 11/16/78

Black Eagle Terrace Scatter
24CA112
97-LC-0-23



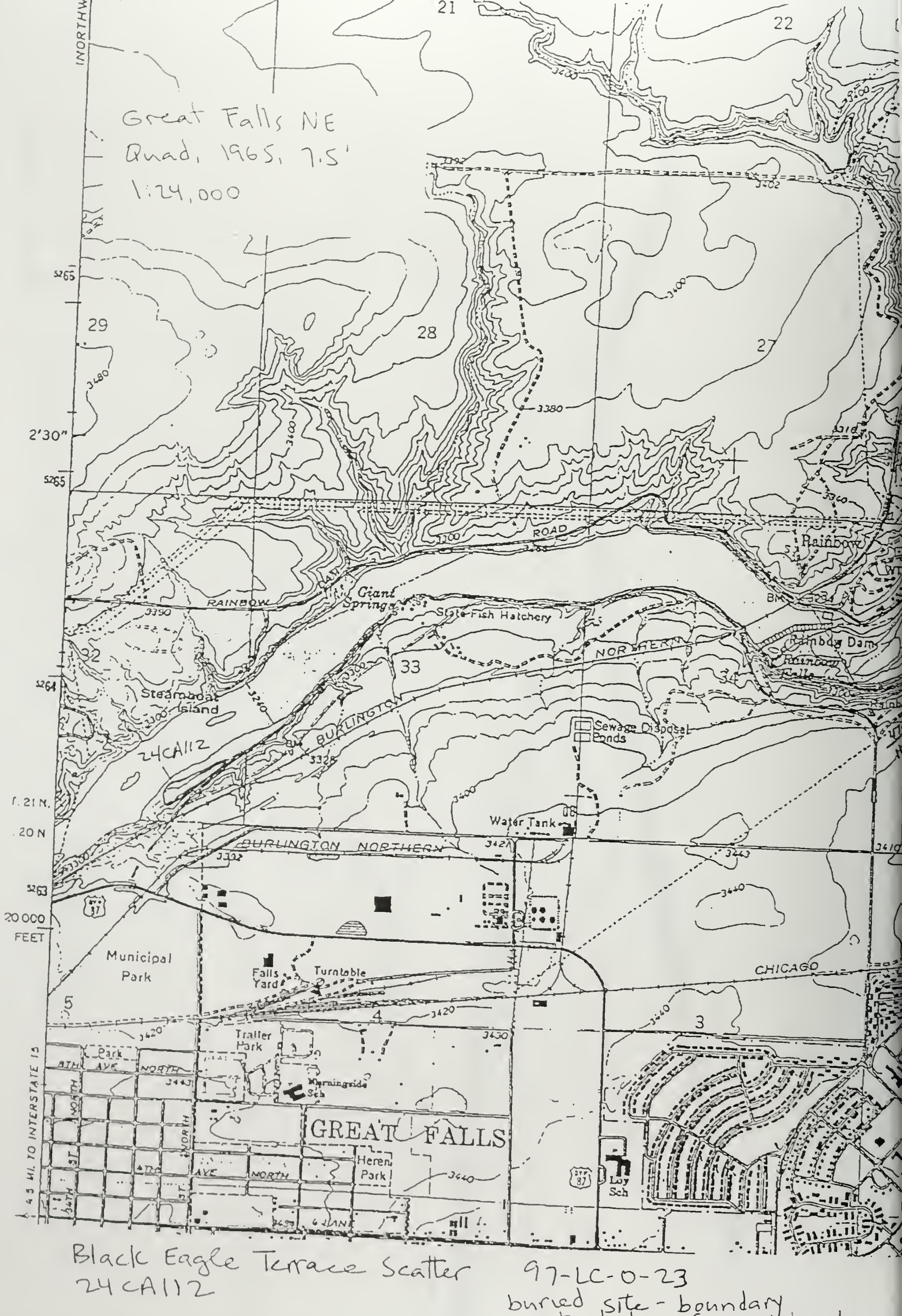
Key

(⁚) = scatter boundary (tentative, based on Davidson/Kuhr Aaberg's 1985 FWP report).

\\\ = area of fire-cracked rock and chunk seen 5.14.97

• x = shovel probe

trail



Great Falls NE
Quad, 1965, 7.5'
1:24,000

Black Eagle Terrace Scatter
24CA112

97-LC-0-23
buried site - boundary
is tentative, from Aaberg's
1985 Davidson/Kuhs [illegible]

File #: 97-LC-0-23

CULTURAL SITE RECORDS
Historic Property

LD #: Atkinson Foundation
: Great Falls NE Quad, 7.5',
STATE #: 24CA628
AERIAL PHOTO: n.a.
NTY: Cascade CONTOUR: > 3240',< 3270' :3250' feet + Msl
DIAN: Principle T21N, R4E, Sec. 32, SW of SE of SE
M.G.: Zone 12; 482555mE, 5263490mN/
/LONG. (optional): o
" N Lat. ' W Long/ o

LOCATION: The site is on a terrace above the Missouri River heast of Great Falls, MT. It's on the southeast side of the River iles above Giant Springs, opposite Black Eagle Island. The legal tion is given above.

SS: From the Great Falls office of Montana Department of Fish, ife, and Parks, drive southwest on the new Giant Springs Road .7 to the unsigned roadside parking area. Hike the old road down e terrace then take the user-developed trail that runs along the terraces about .2 miles upriver to the concrete foundation ite Black Eagle Island.

DESCRIPTION: The site consists of a concrete foundation and ric artifact scatter on the southeast bank of the Missouri, east of Great Falls. Artifacts exposed near the feature and nation from the Cascade County Archivist indicate it was a 920s feature. A two-track links the area of the foundation to d main road through the area. No other historic features were Much of the terrace supports crested wheatgrass and appears to een plowed or hayed in the past.

YPE: historic occupation
STORIC NAME: unknown
MMON NAME: unknown

IONS: 33 feet NxS by 50 feet ExW
TED AREA: 1650 square feet.

DESCRIBE THE METHOD USED TO DETERMINE SITE EXTENT AND BOUNDARIES: The waterline is the west boundary, an abrupt natural edge to the next terrace is the east boundary, and north and south boundaries were arbitrarily defined as ten feet beyond the foundation in those directions.

DEPTH OF CULTURAL DEPOSIT: Maximum: 4 feet (base of foundation); Mean: 2.5 inches (a shovel probe dug beside the foundation yielded broken glass to a depth of about 5 inches)

DESCRIBE METHOD USED TO DETERMINE DEPTH: see above

VEGETATION ASSOCIATED WITH SITE FUNCTION: The terrace north and east of the foundation may have been plowed or hayed in the past. Sod development is absent and soil type is uniform to at least 16 inches below surface. Native grasses and forbs were minimal although crested wheatgrass and currant bushes were abundant.

FAUNA ASSOCIATED WITH SITE FUNCTION: unknown

CULTURAL GEOLOGY:

LANDFORM SETTING: terrace

EXPOSURE TO SUN: fully exposed

EXPOSURE TO PREVAILING WIND: exposed

NEARBY WATER: Distance: site boundary
Direction: west
Nature of water source: Missouri River

SITE MODIFICATIONS: No building or roof covers the foundation, apparently it was dismantled, and the open space has accumulated deposition naturally. A trail borders the feature and there are two-tracks and litter in the area. This suggests diagnostic artifacts, if present, may have been collected.

FEATURES: The foundation measures 13' n-s by 20 'e-w. Pebbles in the concrete are relatively large. It's set into the edge of the terrace so that the top of the east wall is level with the ground but the west wall is four feet high on the outside. The current ground level inside is relatively even, 21 inches below the top of the foundation at the northwest corner. Two quarter-circle concrete steps are set into the southwest corner. An oval drain hole is centered in the west wall, a foot above the outside ground level. It's a foot high by eight inches wide and a wood stake embedded in the concrete protrudes 1.5" about a foot above the hole. Set into the slope below the hole are six cobbles arranged in a semi-circle open to the river.

ARENT SIGNIFICANCE OF SITE: The site lacks context. Since the
d was Frank Atkinson's "cash entry" just beyond newly founded Great
ls, it may have been part of a homestead or it may have been bought
n the intent to sell. The record search raised this question
hout answering it, and it's unlikely excavation would yield an
ver either. Homesteading (developing an occupation with a
sistence agriculture component) and purchase with intent to sell
important patterns of development with historically different
ications and this foundation isn't a significant representation of
her one. It doesn't qualify for the National Register under 36 CFR
A or D.

does it qualify under 36 CFR 60.4 B or C as an important example
r. Atkinson's developments or the evolution of concrete
dations.

ONAL REGISTER STATUS: ineligible

TIAL IMPACTS TO SITE AND/OR ITS INTEGRITY: The Lewis and Clark
st and the Montana Department of Fish, Wildlife, and Parks propose
velop an interpretive trail from Giant Springs Park to Black
Terrace, via the old Giant Springs Road (24CA267). The route
s the terrace follows an abandoned two-track and an existing
developed trail. This trail borders the foundation. While trail
ruction is unlikely to affect the feature directly, trail traffic
esult in graffiti, collecting, and/or unauthorized digging at the
ation. The site has been evaluated as insignificant so no
ance or mitigation are recommended.

NTS:

Public land administered by the Montana Department of Fish,
fe, and Parks; Great Falls Office

: n.a.

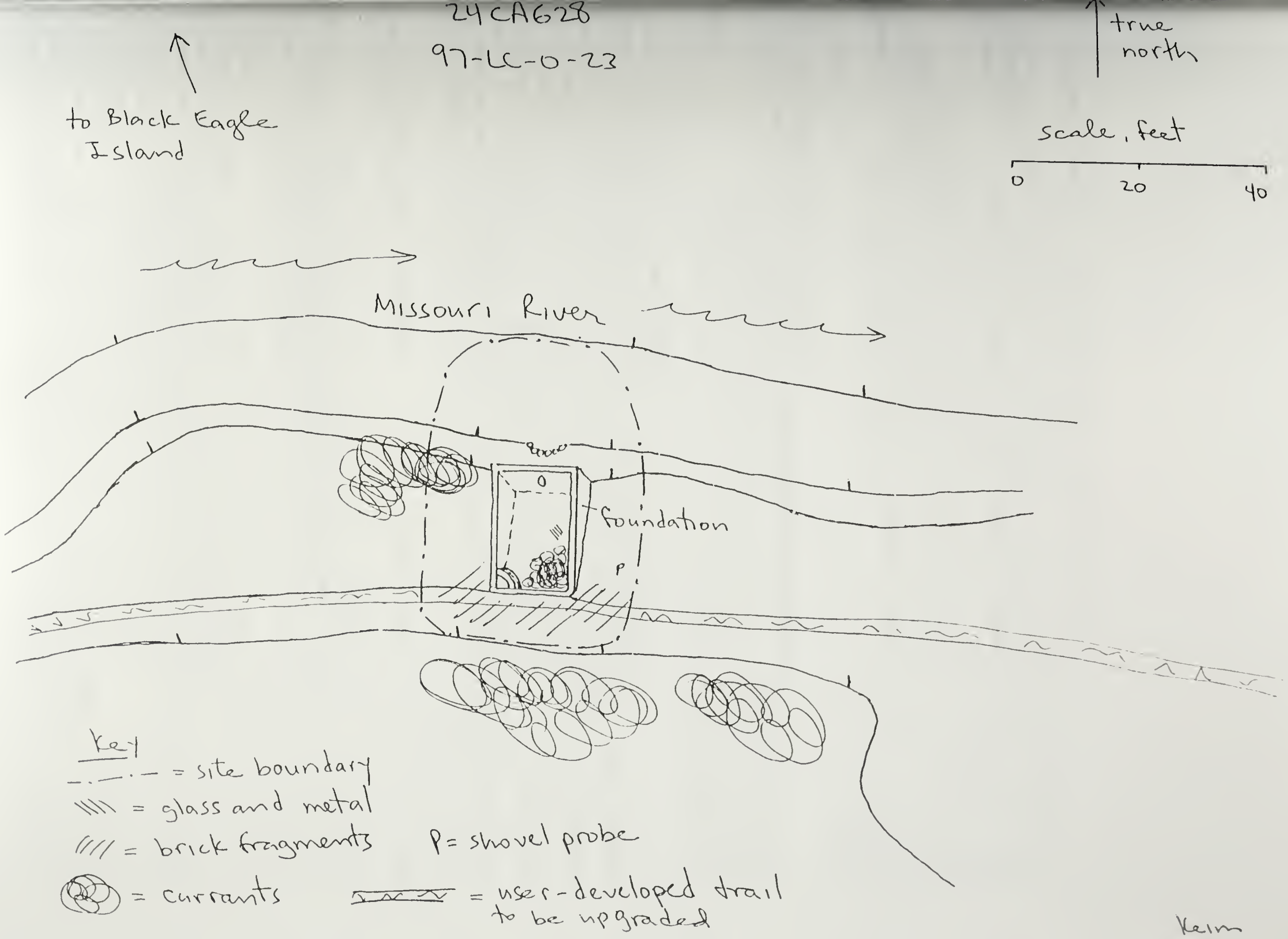
RAPHS: S.O. Roll 6-7/97, frames 15 and 16: foundation; frames
terrace overview.
PHOTO REPOSITORY: Lewis & Clark NF, Supervisor's Office,
Great Falls.

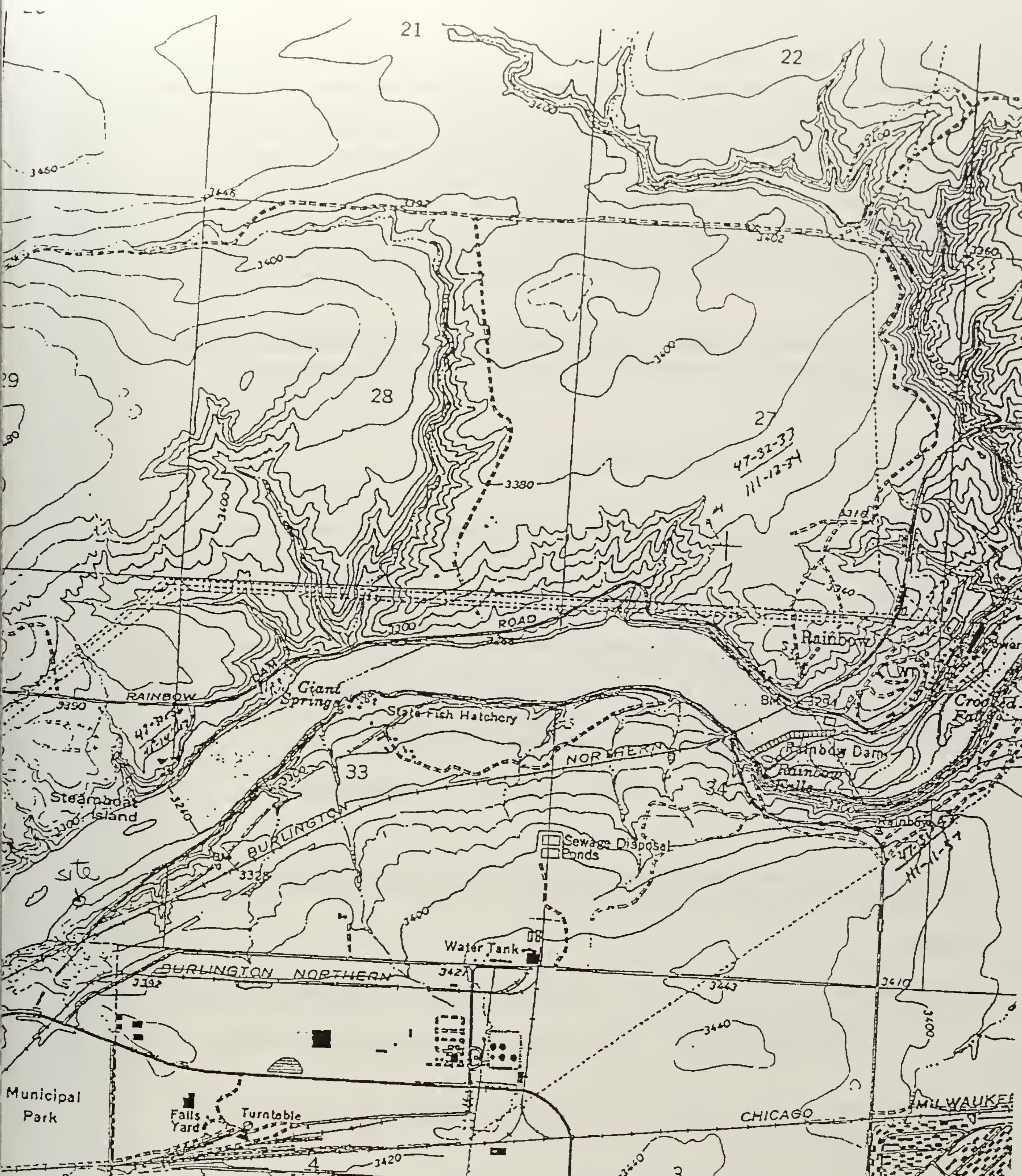
ECORDER(S): K. Keim and T. Cherullo, Lewis and Clark National
archeologists
DATE: 7/9/97

APPENDED DOCUMENTS: scale map of site, topo map of area

24CA628

97-LC-0-23





son Foundation 24CA628
C-0-23

Great Falls NE Quad
7.5', 1:24,000 1965

APPARENT SIGNIFICANCE OF SITE: The site lacks context. Since the land was Frank Atkinson's "cash entry" just beyond newly founded Great Falls, it may have been part of a homestead or it may have been bought with the intent to sell. The record search raised this question without answering it, and it's unlikely excavation would yield an answer either. Homesteading (developing an occupation with a subsistence agriculture component) and purchase with intent to sell were important patterns of development with historically different implications and this foundation isn't a significant representation of either one. It doesn't qualify for the National Register under 36 CFR 60.4 A or D.

Nor does it qualify under 36 CFR 60.4 B or C as an important example of Mr. Atkinson's developments or the evolution of concrete foundations.

NATIONAL REGISTER STATUS: ineligible

POTENTIAL IMPACTS TO SITE AND/OR ITS INTEGRITY: The Lewis and Clark Forest and the Montana Department of Fish, Wildlife, and Parks propose to develop an interpretive trail from Giant Springs Park to Black Eagle Terrace, via the old Giant Springs Road (24CA267). The route across the terrace follows an abandoned two-track and an existing user-developed trail. This trail borders the foundation. While trail construction is unlikely to affect the feature directly, trail traffic may result in graffiti, collecting, and/or unauthorized digging at the foundation. The site has been evaluated as insignificant so no avoidance or mitigation are recommended.

COMMENTS:

OWNER: Public land administered by the Montana Department of Fish, Wildlife, and Parks; Great Falls Office

TENANT: n.a.

PHOTOGRAPHS: S.O. Roll 6-7/97, frames 15 and 16: foundation; frames 19-22: terrace overview.
PHOTO REPOSITORY: Lewis & Clark NF, Supervisor's Office, Great Falls.

SITE RECORDER(S): K. Keim and T. Cherullo, Lewis and Clark National Forest archeologists
DATE: 7/9/97

LIST OF APPENDED DOCUMENTS: scale map of site, topo map of area

Appendix B
Interpretive Master Plan

Lewis & Clark Natural History Walk Conceptual Plan
River's Edge Trail System
Great Falls, Montana

Introduction

Following is the final draft of the conceptual plan for the Lewis and Clark Natural History Walk. This draft further refines the proposed themes and subthemes and includes proposed design guidelines for interpretive kiosks and panels. Initially the planning committee suggested six interpretive stops along the Natural History Walk. We are proposing seven themes and stops, recognizing not all may be used.

The approximately 1.5 mile trail begins at Giant Springs Hatchery and Visitor Center and heads west along the river past the Lewis and Clark Interpretive Center and Living History site. The trail continues west, leaving the river's edge, passing through an open scrub-grassland, and returning to the river's edge near Steamboat Island. The terminus of the Lewis & Clark Natural History Walk is slightly downriver from Black Eagle Island. The remains of an old concrete structure known as the Atkinson foundation identify the site. A cultural resource survey conducted by the Forest Service found the site relatively recent (circa 1920) and insignificant (Keim, 1997). This existing foundation could be used as a foundation for a viewing deck. There are several places along the Natural History Walk where the trail could connect to the Rivers Edge Trail on the bluff above.

In addition to the Lewis & Clark Natural History Walk, there are four other interpretive "sites" in the vicinity: Montana Fish, Wildlife & Parks Region 4 Headquarters; Giant Springs Heritage State Park and Fish Hatchery; Rivers Edge Trail; and the Lewis & Clark Interpretive Center and Living History Center. Visitors are likely to visit more than one site at a time and may be confused about the ownership, boundaries and regulations of the different sites. It would be helpful to clearly distinguish the Natural History Walk intepretive panels from those associated with the Lewis & Clark Visitor Center. This could be done with an identifying icon for the Natural History Walk which would appear on panels and any printed materials. Clear signing at intersections with the Rivers Edge Trail will alert visitors to the fact that they are leaving the main trail. The Natural History Walk should be complete in itself, yet offer an enriching option for visitors to the other sites.

It is our intention that themes and subthemes of the Natural History Walk complement interpretation at the Lewis & Clark Interpretive Center and Living History Site, as well as interpretation along the River's Edge Trail. These sites have connecting stories, and could be considered 'chapters' of the same book: the fish and wildlife of this area; the fish hatchery and Giant Springs; the dams and falls on the Missouri, the story of the Lewis & Clark Expedition and their encounters in Indian country. The overall theme for the Lewis & Clark Natural History Walk ties together themes from the other sites by focusing on plants and wildlife seen by Lewis & Clark and the changes in our natural environment since their time. The project offers outstanding opportunities to learn about the natural history aspects of the Lewis & Clark expedition, and to encourage conservation of our natural heritage.

The Interpretive Message

Lewis & Clark Natural History Walk Overall Theme:

We can still find some of the plants and animals that Lewis and Clark saw, yet there have been many changes and losses over the last 200 years.

Interpretive Objective:

- In general, we want visitors to understand the differences between the natural history of Lewis & Clark's time and today.
- Specifically, we want visitors to know:
  - some of the plants and animals encountered by Lewis & Clark along the Missouri River.
  - that many plants and animals have been lost since 1805; others are declining and may go the way of the passenger pigeon without our help.

Interpretive Themes and Subthemes:

1. **Along this trail you may see or hear some of the birds described by Lewis and Clark when they traveled up the Missouri through this area.** (*Year-round residents*: common merganser, northern flicker, bald eagle, black-billed magpie; *Summer residents*: eastern or western kingbird [? Lewis' description did not provide enough information for positive identification], Brewer's blackbird, belted kingfisher, mountain bluebird, American goldfinch and osprey.)

2. **The native cutthroat trout which Lewis first described here are now uncommon in the Missouri River, replaced almost entirely with introduced brown and rainbow trout.**

   A) Cutthroat trout are quick to strike and easy to catch, making them more susceptible to anglers than warier brown and rainbow trout.

   B) Pure-strain westslope cutthroat trout are rare because they interbreed with introduced fish such as rainbow trout.

3. **The Cretaceous sandstone cliffs before you are reminiscent of the White Cliffs of the Missouri, though not as spectacular.**

   A) The White Cliffs of the Missouri were a source of wonder to the Lewis and Clark Expedition.

   B) The cliff swallows and their "nest of clay with a globular form" seen here were carefully described by Lewis at the White Cliffs.

4. **Cottonwoods played a significant role in the Lewis and Clark expedition.**

   A) The Corps of Discovery used cottonwoods for firewood, dugouts, shelter from the elements and many useful items such as cart wheels and boat paddles .

   B) The cottonwood was a part of the Plains Indian culture, used for food, dye, medicines, and forage for their horses.

   C) Lewis and Clark were the first to describe the narrowleaf cottonwood.

   D) Cottonwood groves are not as plentiful as they were in the days of Lewis and Clark, due to human alteration of the environment since European settlement.

5. **Lewis collected a specimen of the now-extinct passenger pigeon near Great Falls.**

   A) In Lewis' time, the passenger pigeon was the most abundant bird on earth.

   B) The mourning dove, another member of the pigeon family, was also frequently observed by Lewis and is still commonly heard along this trail.

6. **Many of the grassland species which Lewis and Clark saw and described are gone or declining.**

   A) The western meadowlark, now declining over most of its range, was first described by Lewis during the portage around the falls.

   B) "These larks as I shall call them add much to the gayety and cheerfulness of the scene, " said Lewis about either the McCown's or Chestnut-collared longspur, both of which are migratory grassland birds that face an uncertain future.

   C) "In these plains I observed great numbers of the brown Curlews" may have described the long-billed curlew, a declining species throughout its range, or the Eskimo curlew, now nearly extinct.

   Note: The long-billed curlew and the longspurs have not been seen in this small grassland, to our knowledge, but can be seen in areas near Great Falls.

7. **From this spot you can see Black Eagle Island, a welcome landmark which the Hidatsa Indians told Lewis and Clark to look for.**

   A) Up ahead you can see Black Eagle Dam, the "Upper Pitch" of the expedition's portage.

   B) Though the cottonwood snag and golden eagle's nest are gone, you may now see white pelicans, double-crested cormorants, Canada geese and other waterfowl on islands in the river.

Proposed Interpretive Sites for Lewis & Clark Natural History Walk

Lewis & Clark Natural History Walk Proposed Interpretive Sites

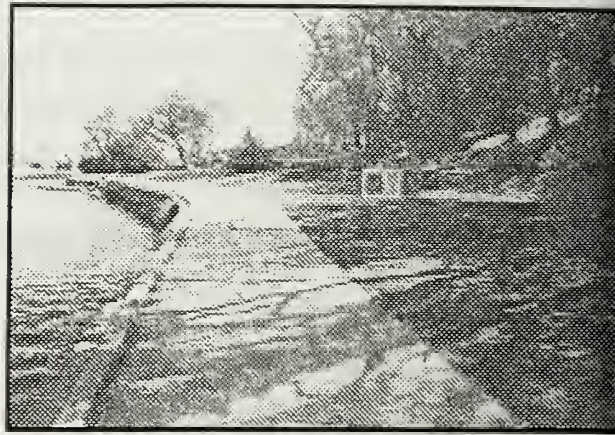
The following are proposed sites along the Lewis & Clark Natural History Walk. These sites are keyed to a trail map by number. The locations of the sites on the map are approximate.

1. **Orientation Kiosk at Entrance to Giant Springs Heritage Park and Fish Hatchery**
2. **Bridge**
3. **Sandstone Cliffs/Pond**
4. **Narrowleaf Cottonwood Stand**
5. **West of Living History Center**
6. **Scrub-Grassland Area**
7. **Trail Terminus at the Atkinson Foundation**

ote: Map is pending. FWP (Design & Construction)

1. Entrance Kiosk

Site Description: Site is located at the west boundary of the Giant Springs Heritage Park and Fish Hatchery. Kiosk will be oriented perpendicular to the Natural History Walk so that visitors can view both sides of the kiosk.

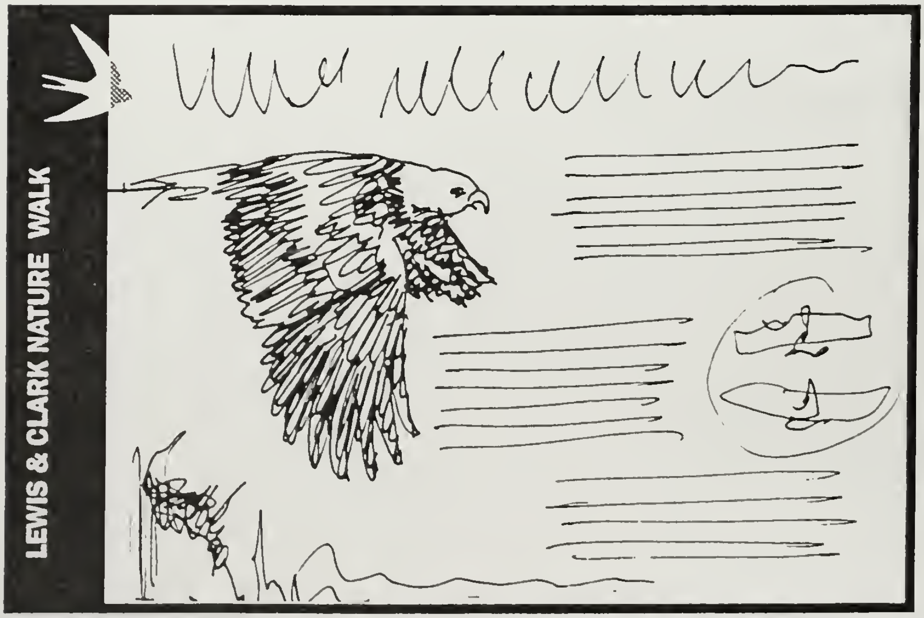


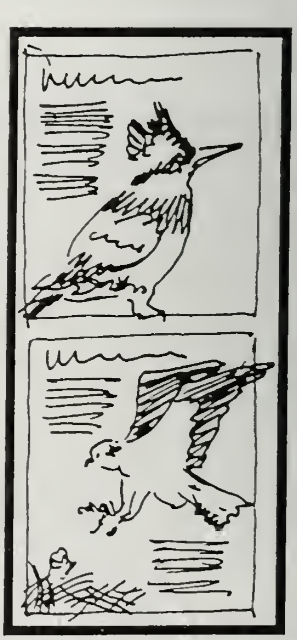
Media: Orientation kiosk with interpretive panels mounted on both sides, brochure box and fee collection station. One side of kiosk may include an "interactive" interpretive panel (see Design Guidelines).

The Natural History Walk interpretive panel will be on the Giant Springs side of the kiosk (east facing side). The other side will welcome visitors to Giant Springs Park, post regulations and information and house the fee collection box (not part of the Natural History Walk project).

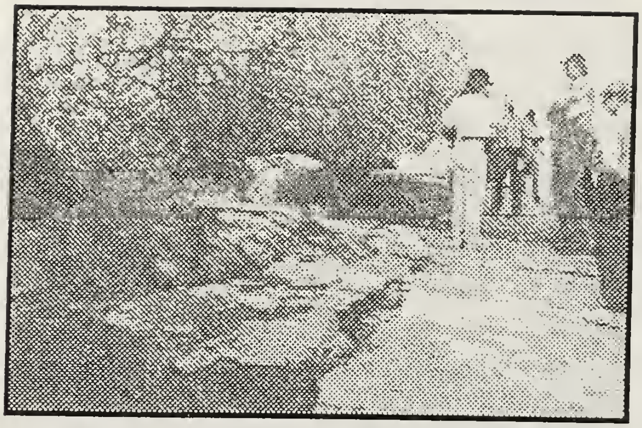
Accessibility Rating: Very good — the 10' wide trail will be paved with asphalt at this point.

Theme #1: Along this trail you may see or hea some of the birds described by Lewis and Clar when they traveled up the Missouri through this area. (year-round residents: common merganser, northern flicker, bald eagle, black-billed magpie; summer residents: eastern or western kingbird, Brewer's blackbird, belted kingfisher, mountain bluebird, American goldfinch and osprey.)





2. Bridge



Site Description: Site is located along the bridge that spans the drainage swale. An interpretive panel will be attached to the bridge railing, on the Missouri river side.

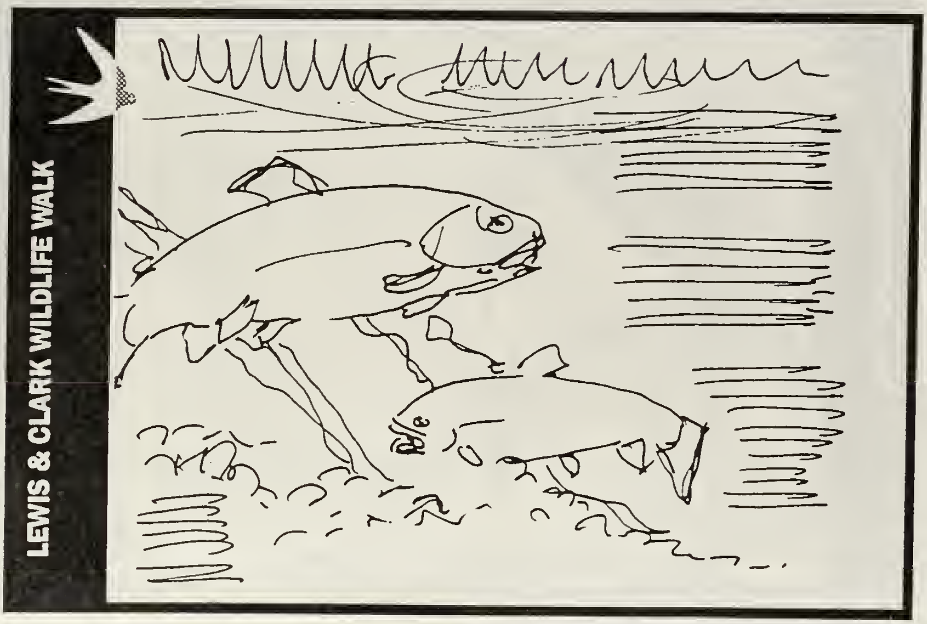
Media: One low-profile interpretive panel. Visitors on the bridge have a good view of the river. We suggest including a bench along the bridge railing here, near the interpretive panel.

Accessibility Rating: Very good — trail will be paved at this point. Panel will be installed at a height and angle so as to be easily read by children and persons in wheelchairs.

Theme# 2: The native cutthroat trout which Lewis first described here are now uncommon in the Missouri River, replaced almost entirely with introduced brown and rainbow trout.

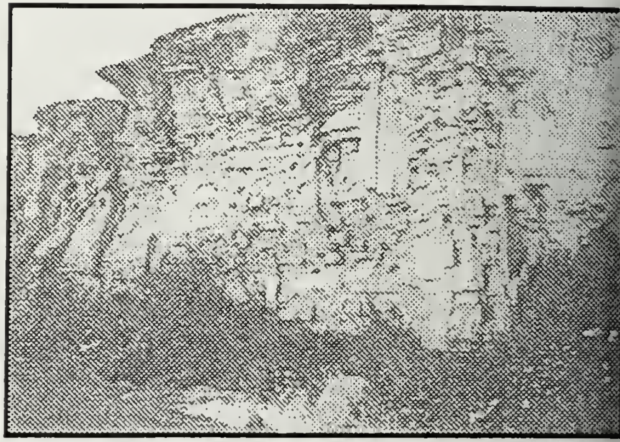
A) Cutthroat trout are quick to strike and easy to catch, making them more susceptible to anglers than warier brown and rainbow trout.

B) Pure-strain westslope cutthroat trout are rare because they interbreed with introduced fish such as rainbow trout.



3. Sandstone Cliffs/Pond

Site Description: Site is located just past the cliffs near the small pond. The interpretive panel will be located in a small pullout on the opposite side of the trail, where visitors can see the swallow nests on the sandstone cliffs as well as listen to and watch the birds.



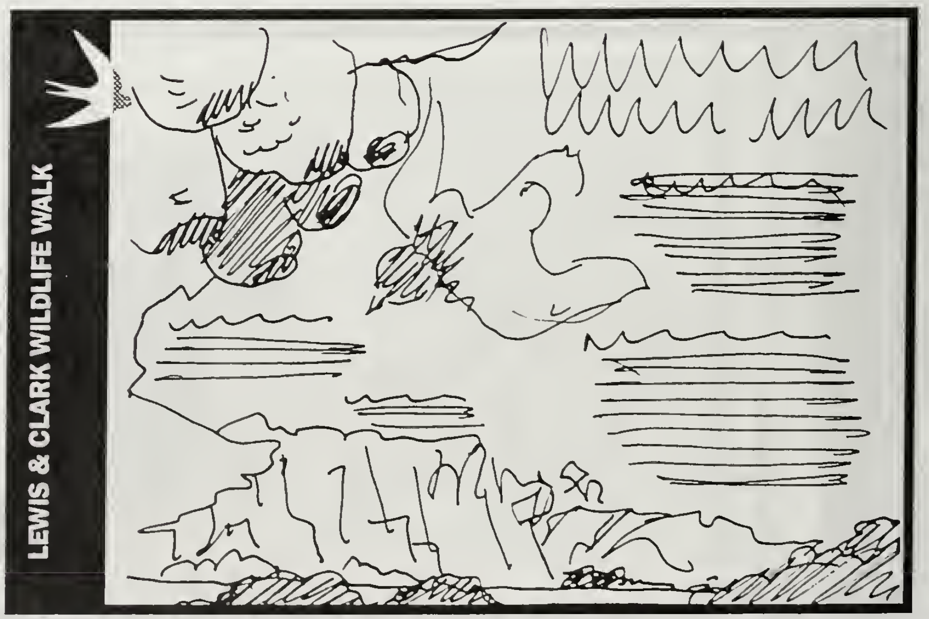
Media: One low profile interpretive panel and a bench for resting and observing/listening to the birds.

Accessibility Rating: Very good — trail will be paved at this point. Bench provides an accessible rest-stop.

Theme #3: The Cretaceous sandstone cliffs before you are reminiscent of the White Cliffs of the Missouri, though not as spectacular.

A) The White Cliffs of the MIssouri were a source of wonder to the Lewis and Clark Expedition.

B) The cliff swallows and their "nest of clay with a globular form" seen here were carefully described by Lewis at the White Cliffs.



4. Narrowleaf Cottonwood Stand

Site Description: Located near the west end of the small pond where a few narrowleaf cottonwood trees are growing. Some of the trees have collars for protection from beaver damage. There is also some observable beaver damage to several cottonwood stumps nearby.

Media: One low profile interpretive panel allows viewers to identify and study the narrowleaf cottonwoods after reading the panel.

Accessibility Rating: Very good — trail will be paved at this point. Panel will be installed in a small pullout along the trail.

Theme #4: Cottonwoods played a significant role in the Lewis and Clark expedition.

A) The Corps of Discovery used cottonwoods for firewood, dugouts, shelter from the elements and many useful items such as cart wheels and boat paddles .

B) The cottonwood was a part of the Plains Indian culture, used for food, dye, medicines, and forage for their horses.

C) Lewis and Clark were the first to describe the narrowleaf cottonwood.

D) Cottonwood groves are not as plentiful as they were in the days of Lewis and Clark, due to human alteration of the environment since European settlement.

5. West of Living History Center

Site Description: Site is located just west of the Lewis & Clark Interpretive Center- Living History Center. Here, the wooded area along the trail opens into a scrub-grassland — a good place to hear and see mourning doves.

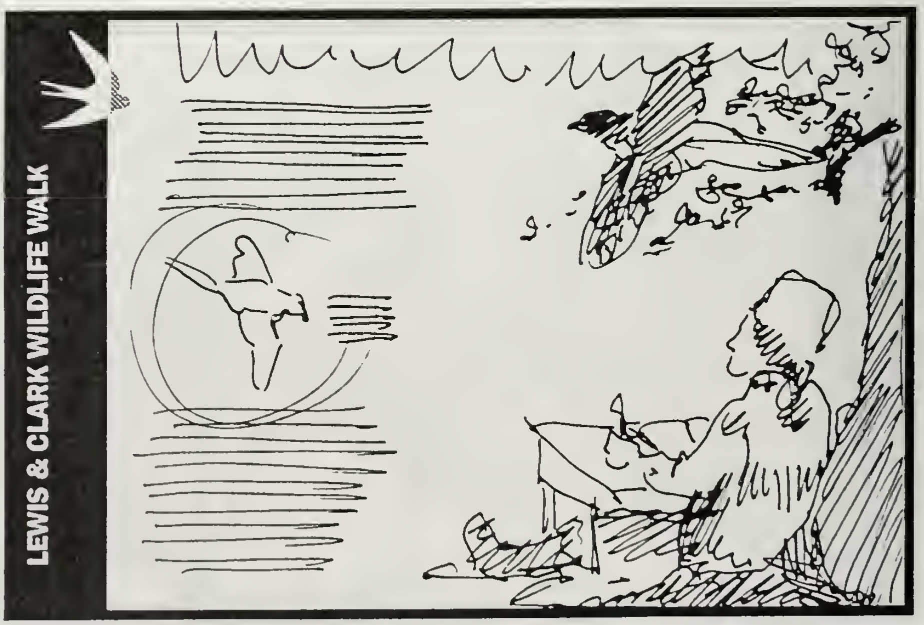
Media: One low profile interpretive panel.

Accessibility Rating: Very good — trail will be paved at this point. Panel will be installed in a small pullout along the trail.

Theme #5: Lewis collected a specimen of the now-extinct passenger pigeon near Great Falls.

A) In Lewis' time, the passenger pigeon wa the most abundant bird on earth.

B) The mourning dove, another member of the pigeon family was also frequently observed by Lewis and is still commonly heard along this trail.



6. Scrub-Grassland Area

Site Description: Site is located close to where the trail begins to descend back toward the river, meandering through an open grassland area. The trail becomes narrower and the asphalt paving ends near this point.

Media: One low-profile interpretive panel and bench. An interpretive panel and pullout will encourage visitors to look for and listen to the birds in this open, grassy area.

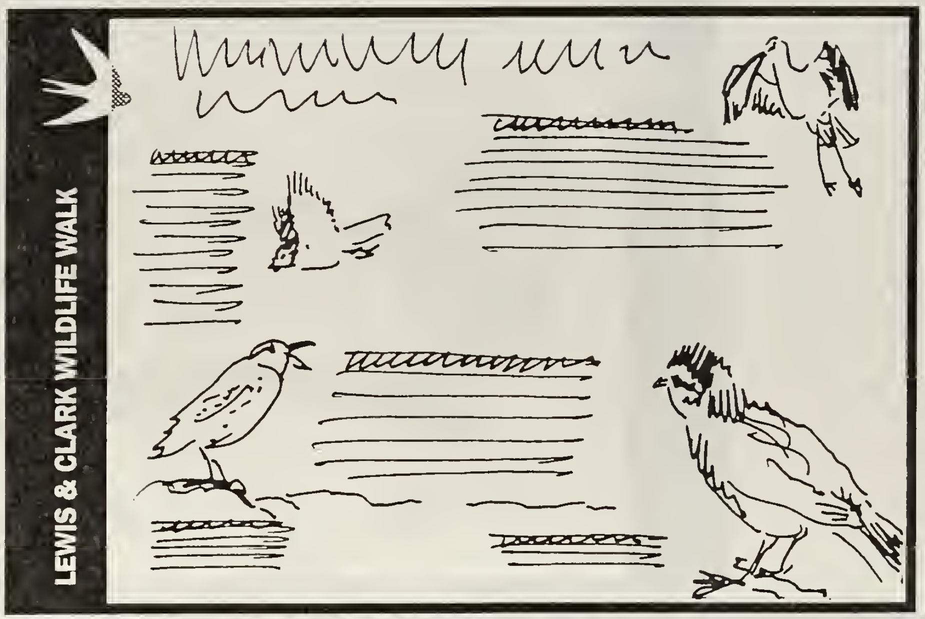
ccessibility Rating: Fair — trail will be 6 feet ide and surfaced with ompacted gravel from this oint to the end. Panel will e installed in a small ullout along the trail.

heme #6: Many of the assland species which Lewis nd Clark saw and described e gone or declining.

A) The western meadowrk, now declining over ost of its range, was first escribed by Lewis during the portage around the falls.

B) "These larks as I shall call them add much to the gayety and cheerfulness of the scene, " said Lewis about either the McCown's or Chestnut-collared longspur, both of which are migratory grassland birds that face an uncertain future.

C) "In these plains I observed great numbers of the brown Curlews" may have described the long-billed curlew, a declining species throughout its range, or the Eskimo curlew, now extinct.



7. Nature Walk Trail Terminus at Atkinson Foundation

Site Description: The Natural History ends at the remains of an old concrete structure slightly downriver from Black Eagle Island. The remaining concrete could be used as a foundation for a viewing deck. From here, visitors have an unobstructed view of Black Eagle and Steamboat Islands and can easily observe the waterfowl.

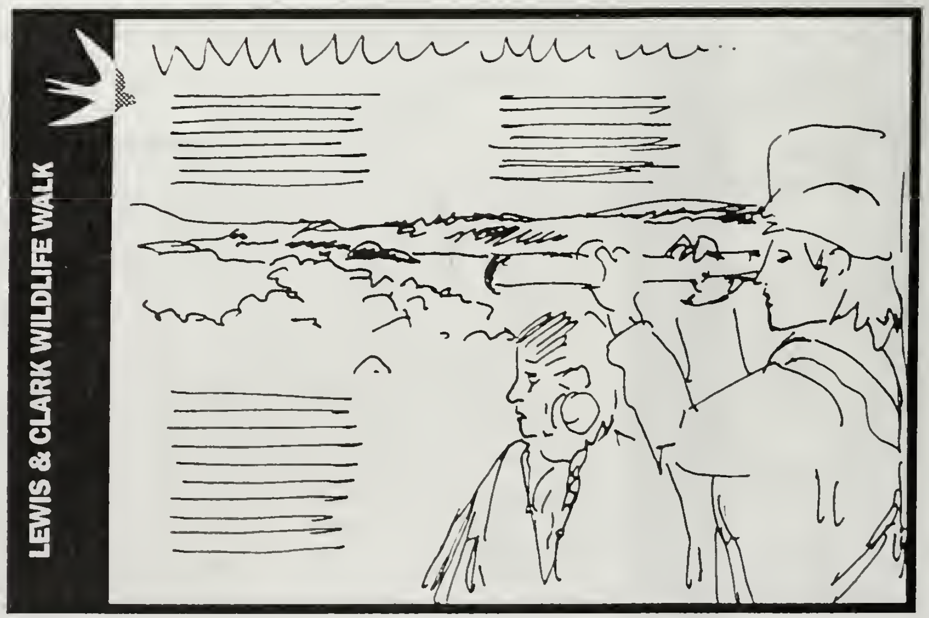
Media: One low-profile interpretive panel, a semi-circular viewing deck and one or two benches make a pleasant wildlife viewing site. Could also include a viewing scope mounted to the deck and a picnic table nearby.

Accessibility Rating: Fair — access to the viewing deck is by the narrower, gravel-surfaced portion of the trail. Deck will be constructed to allow complete accessibility.

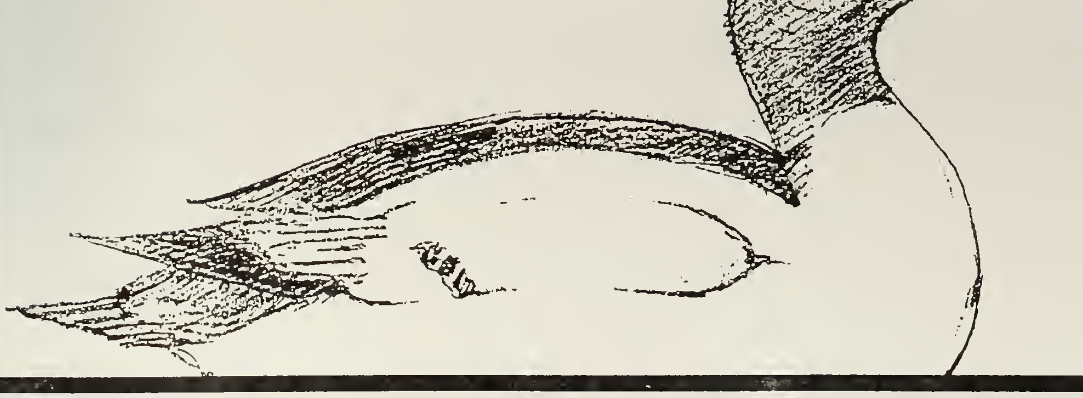
Theme #7: From this spot you can see Black Eagle Island, a welcome landmark which the Hidatsa Indians told Lewis and Clark to look for.

A) Up ahead you can see Black Eagle Dam, the "Upper Pitch" of the expedition's portage.

B) Though the cottonwood snag and golden eagle's nest are gone, you may now see white pelicans, double-crested cormorants, Canada geese and other waterfowl on islands in the river.



Design Guidelines for Lewis & Clark Natural History Walk



Design Guidelines for Interpretive Media:

The L&C Natural History Walk interpretive panels will be designed to complement those of the Lewis & Clark Interpretive Center trail. An Interpretive Kiosk will be installed at the east end of the trail near Giant Springs Heritage Park, which is the beginning of the L&C Natural History Walk. The following are some descriptions of kiosk and panel design and materials.

The Natural History Walk interpretive panels will have an identifying icon on each panel. We propose a stylized cliff swallow as the icon.

Kiosk: A two-sided structure with interpretive message on each panel.

- The kiosk will be constructed according to Montana FWP specifications, using the existing kiosk at the R-4 Headquarters along River's Edge Trail as a model. (A photo of the standard FWP kiosk and conceptual sketches showing a kiosk and interpretive panel both with and without an "interactive" panel are included in this section.)

- Panel size: 36" wide by 24" high.

- Panel Materials: We recommend fused PVC *or* fiberglass embedded panels. Fused PVC is a relatively new technology that has been tested and used for outdoor applications and is reputed to make an excellent outdoor panel. The cost for fused PVC is approximately one half that of fiberglass embedment, which may be considered as an alternative. Fiberglass embedded panels have been used successfully and have a known track record. Both fused PVC and embedded fiberglass panels are designed to resist vandalism, constant UV exposure, extreme cold and scouring by wind and grit, though they may differ in resistance to specific kinds of impacts.

Low-profile interpretive panels: Small panels mounted on low stanchions.

- (See conceptual sketches in this section showing two different interpretive panel formats.)

- Panel size: 36" x 24"

- Panel materials: as above.

- Panel Mounting: low level stanchions should be at appropriate height and angle for wheelchair access. See "Universal Design Standards". Stanchions may be coated rolled steel or aluminum or treated fir timbers.

Typeface for Interpretive Panels:

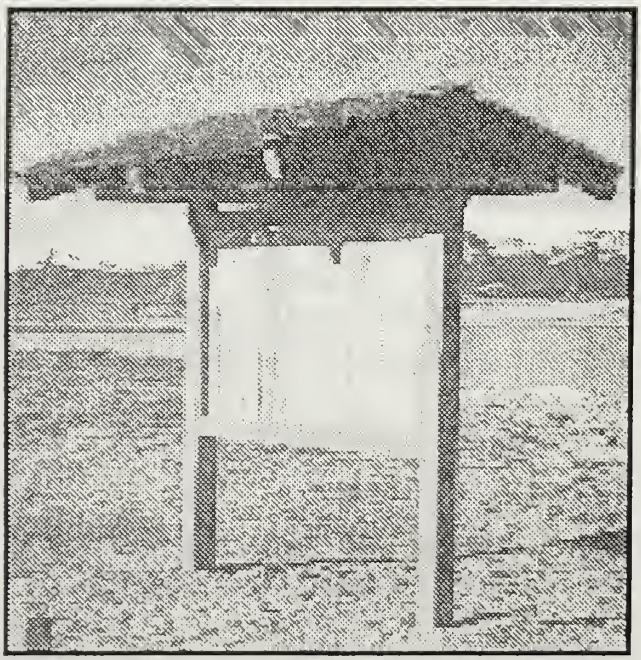
- Type style: Text — Bookman or Century, bold, book or italic. (see appendix)
  Heads, Subheads, captions — Bookman, Century or Franklin Gothic, bold or bold italic.
- Type size: headlines 48 point up to 60 point, subheads 36 point, body copy 24 point and captions 18 point.

Colors:

- A consistent color palette for the interpretative panels and any accompanying print materials creates a sense of identity for the entire interpretive trail. If interpretive panels are produced using spot color or match color, use a limited palette of 8 to 10 colors of the Pantone Ink color system.

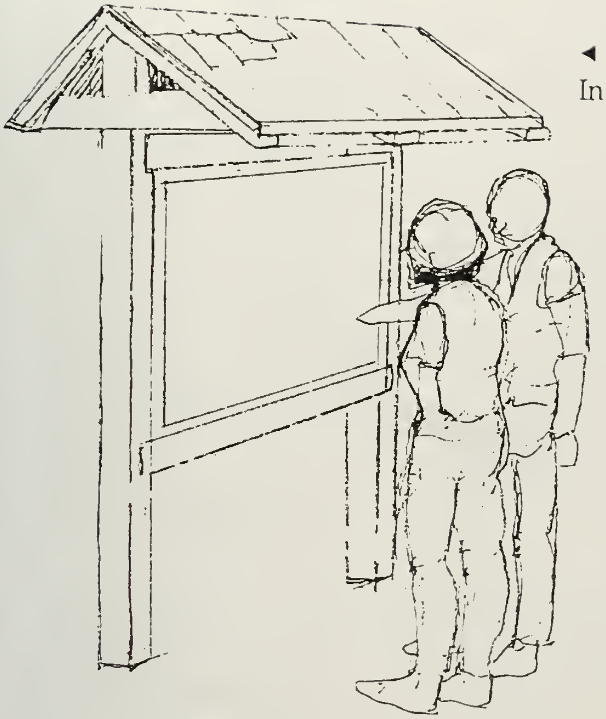
Other considerations:

- Provide ADA access wherever possible. (See section on Universal Design giving some background and some specifications for accessibility.)



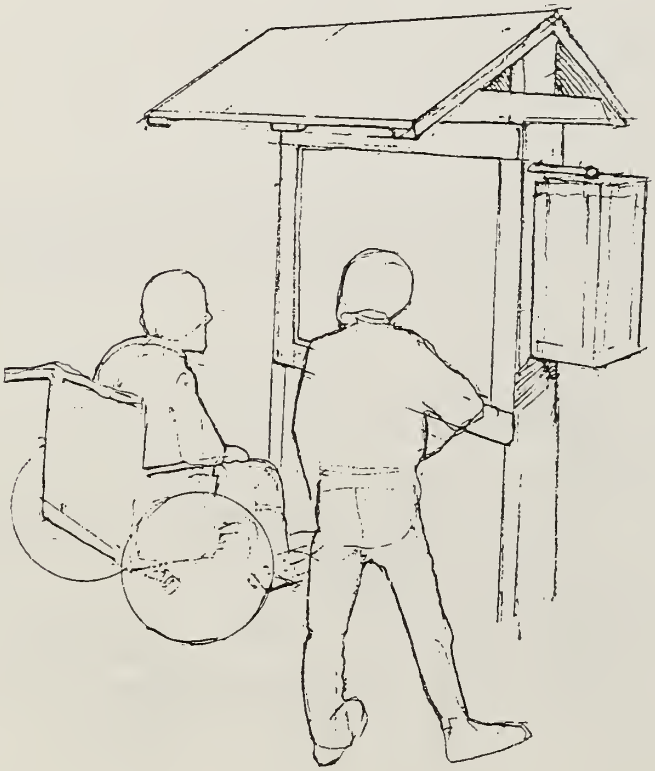
Kiosk Design used by Montana Fish, Wildlife & Parks. Plans and specifications are available from FWP Design and Construction.

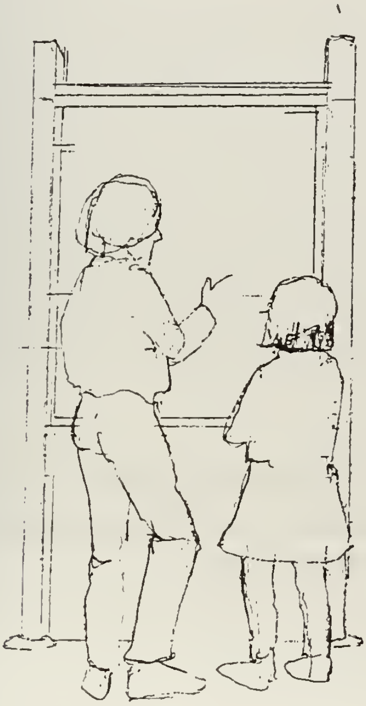
Some Conceptual Designs for Interpretive Kiosks and Panels



◂ Orientation Kiosk with roof cap and Interpretive Panel.

Orientation Kiosk with roof cap, Interpretive Panel and Interactive Interpretive Panel. ▾





◂ Vertical Orientation Kiosk without roof.

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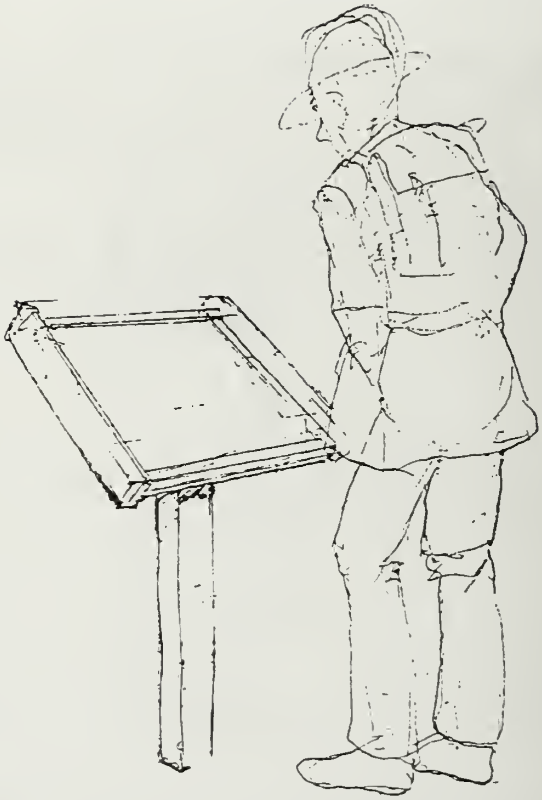
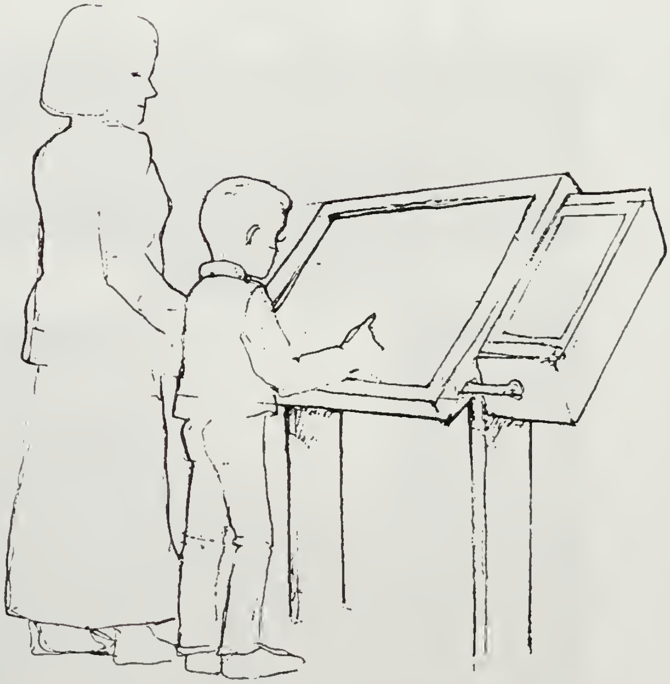
Low-Profile Interpretive Panel with center-leg stanchion. ▶





◀ Low-Profile Interpretive Panel with Interactive "tumbling-box panel"and two-leg stanchion.

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Universal Design

> *"Universal design means taking into consideration the needs of as many people as possible, then incorporating those needs into nature trails, visitor centers, interpretive displays and interpretive publications."*
>
> — "Everyone's Nature" by Carol Hunter.

Interpretive facilities, outdoor recreation and learning opportunities should be accessible to all kinds of people. Careful design and planning of interpretive exhibits and media, as well as consideration of visitor needs and abilities, will create a more fulfilling educational and recreational experience for everyone. All interpretation along the Lewis & Clark Natural History Walk should meet or exceed current ADA standards.

People want to learn about and enjoy the outdoors with their families, friends and other visitors, so accessible facilities should not be segregated. Facilities designed to accommodate senior citizens and people with mobility, visual and hearing impairments can incorporate elements that will enhance the recreation experience for everyone.

As more and more people participate in recreational experiences, we can expect an increased demand for accessible facilities. Most individuals, including those with disabilities, favor outdoor areas that offer several different experiences. Interpretive facilities should be designed to conform to accessibility requirements and to provide varying degrees of challenge and difficulty. If it is impossible or economically unfeasible to make the entire Natural History Walk fully accessible, the disabled should be able to have an equivalent experience in a portion of the area. For example, the first part of the trail from Giant Springs to the Lewis & Clark Living History Center could be made accessible to disabled persons. Following are some brief descriptions of accessibility standards for the interpretation recommended in this plan.

1) Accessible Parking

Visitors often travel to recreation sites by car, so parking is one of the first places where access difficulty is encountered. We recommend that ADA guidelines be followed, so that all visitors may freely enter the proposed recreation sites. (For more detail, see references.)

- Signage should clearly indicate accessible parking spaces, loading zones, site entrances and other facilities for the visitor.

- Parking spaces for cars or vans (accessible spaces must be adequate in number to accommodate expected use levels.)
- Passenger loading zones should be near site entrances.
- Curbs & ramps should be designed to facilitate free movement.
- Lighting should be adequate if the area will be used after dark.

2) The Trail

Accessible trails should be designed to accommodate elderly and blind persons, baby strollers, persons with crutches, single wheelchair, 2 wheelchairs, and single wheelchair with companion. Trails should be wider with firm, level surfaces and defined edges. Relatively short loop trails (1/2 mile if terrain is more difficult, 1 - 2 miles if terrain is level) offer the best opportunity to those who tire easily. Provide varying options and graduated challenges. Consider the following when designing accessible trails:

- Ground surfaces vary in accessibility. Listed here are some commonly used surface materials, in descending accessibility rating: poured concrete, asphalt, crushed aggregate screenings, wood decking, concrete unit-pavers, compacted gravel, grass, untreated soil, loose gravel, wood chips, sand. (The last four surfaces are not recommended in ADA accessible areas.) If wood decking is used, planks must run perpendicular to the direction of travel and gaps between planks should be a maximum of 1/2 inch.

- Limit the number of level changes and keep slopes to a minimum, if possible. Wherever changes in level are necessary, provide ramps and steps.

- Make trails a minimum of 36 inches wide.

- Install detectable guard edging or curbs on trails.

- Handrails or guards are useful at hazardous locations or when there is a great level change. (e.g.: bridges, boardwalks, lookouts, view points.)

- Passing spaces must be provided if the trail is less than 60" wide. Whenever possible, use natural topographic features to create passing spaces.

- Provide rest areas or stopping points at intervals of about 400 feet. Set back the rest area from trail to avoid obstruction. Rest areas and passing spaces can be combined. Install benches at regular intervals.

- Signage: trail length and terrain should be clearly indicated at the trailhead.

- Provide lighting when facilities are expected to be used after dark, especially on signs, interpretive panels, comfort stations, steps, gates, boardwalks, ramps, and parking areas.

3) Picnic Areas

Sturdy picnic tables should be placed on firm, level surfaces and have adequate surrounding space for disabled persons to maneuver.

4) Dimensions Standards for Accessibility

See Hunter, Carol and PLAE Inc. in **References** for detailed dimension standards for accessible parking areas, comfort stations, campgrounds, picnic areas, signs and trails.

5) Media Standards for Accessibility

- Visual Accessibility must consider lighting, color, contrast, typography, graphics and illustrations, photographs, large print, and tactile media.
- Hearing Accessibility must consider sound delivery methods, assisted listening devices, captioning, audibility.
- Physical Accessibility must consider interactive exhibits, standing viewers and wheelchair users, video, models and reproductions.
- General Accessibility considerations are to use plain language (for lay people), informational kiosks, maps and guides.
- Other considerations:

a) Interpretive Panels should be clearly visible and logically placed. The height and angle of panels is important for accessibility.

b) Directional Signage and Maps. Signs can be used to identify accessible areas. If accessibility is limited, signage should enable a disabled person to decide whether or not to enter the area.

c) Brochures, orientation maps and interpretive guides may be published in large-print as well as standard type sizes, if budget allows. A children's version of a publication may also be appropriate. Graphics, illustrations, diagrams, photographs and color should be used wherever possible to make the information easily understood by a range of abilities. Text should be kept to a minimum.

Additional Photos of the Proposed Interpretive Sites

View from Giant Springs Park at the location of the orientation kiosk, interpretive stop #1.

Interpretive stop # 3 near cliffs and pond, located on Missouri side of Natural History Trail.

Drainage swale near future bridge

Pond near cliffs and stop # 3.

View from Orientation Kiosk toward future bridge and interpretive stop # 2.

View from above the pond, looking toward interpretive stop # 4, the cottonwood stand.

Proposed Illustration List for Lewis & Clark Natural History Walk

Birds, Panel 1:

Eastern kingbird .... ☐

Western kingbird .... ☐

American gold finch .... ☐

Belted kingfisher .... ☐

Brewer's blackbird .... ☐

Mountain bluebird .... ☐

Osprey .... ☐

Bald eagle .... ☐

Common merganser .... ☐

Northern flicker .... ☐

Black-billed magpie .... ☐

Fish, Panel 2:

Westslope Cutthroat Trout .... ☐

- Brown Trout .... ☐
- Rainbow Trout .... ☐
- Map showing range .... ☐

Swallows, Panel 3:

White Cliffs landscape .... ☐

Cliff Swallows with nesting colony .... ☐

Cottonwood, Panel 4:

Cottonwood grove .... ☐

Narrowleaf cottonwood detail .... ☐

Cottonwood uses -insets(?) .... ☐

Pigeons/Dove, Panel 5:

Lewis at his writing desk specimen bird,
pass. pigeon flock in background .... ☐

Inset: Mourning Dove .... ☐

Inset: Passenger pigeon .... ☐

Grassland Birds, Panel 6:

Western Meadowlark on rock .... ☐

McCown's longspur in air .... ☐

Chestnut-collared longspur on ground .... ☐

Long-billed curlew, air & ground .... ☐

Black Eagle Island, Panel 7:

Black Eagle Island w/ snag & nest .... ☐

Lewis & Sacajawea looking at island .... ☐

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